



- ENFERMEDADES, LLANOS
COLOMBIA Y VE.
- ENFERMEDAD, IMPACTO
- EPIDEMIAS, GUERRA
TRAFICO DE ESC.
- MISIONES JESUITAS, COL
Y VENEZ

A JOYFUL HARVEST OF SOULS:
DISEASE AND THE DESTRUCTION OF THE
LLANOS INDIANS (*)

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(NET)

"No es justo el pensamiento de los escritores que creen que América fue despoblada por las armas de los primeros conquistadores. Para convertirla en poco tiempo en una soledad... bastaría una sola viruela" (Padre Felipe Salvador Gilij, S. J., eighteenth century).

The effects of epidemic disease on New World populations has been amply documented. There appears to be general agreement that the inhabitants of the tropical lowlands suffered more severely than those of other areas in the Western Hemisphere (Cook and Borah 1971: 411-29; Crosby 1972: 38; Denevan 1970a: 70; 1970b: 251; 1976: 6; Dobyns 1966: 441; 1976: 2). Unfortunately, the documentary evidence available for tropical, lowland South America is often poor or at best fragmentary, and has received only limited scholarly attention (Denevan 1970a, 1970b, 1976; Sweet 1969, 1970). Such is the case for the llanos of Colombia and Venezuela.

Despite the lack of good information, particularly for the sixteenth and seventeenth centuries, it can be shown that the impact of disease on the indigenous inhabitants of the llanos was substantial. The magnitude of this impact, in terms of specific numbers or percentages of population decline, however, can only be gauged impressionistically at this time.

* Paper presented at the symposium "Epidemics and Native American History in the Tropics", Annual Meeting of the American Society for Ethnohistory, Austin, Texas, November 1978.

1. I would like to thank Nancy C. Morey for her knowledgeable comments and criticisms of this paper. However, I am responsible for any errors it may contain.

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But the "impressions" gained from the historical sources produce a compelling picture of devastation, disorganization, and cultural disintegration.

The llanos consist of about 480,000 square kilometers of eastern Colombia and west-central Venezuela. Some 85% of the area is composed of savanna, the remainder is piedmont and riverine (gallery) forest. The area herein referred to as the llanos does not, in fact, correspond to this total region, but only to the western section. The Portuguesa River forms a rough cultural boundary that separates the indigenous groups to the west from those to the east (see map). Aboriginal interaction in the east tended to focus upon the Lower Orinoco and its southward flowing tributaries. Aboriginal interaction in the west centered upon the Middle and Upper Orinoco and such important southeast and eastward flowing tributaries as the Apure, Arauca, Meta, Vichada, and Guaviare².

In a number of previous papers and publications we have attempted to show that societies of the llanos had denser populations and greater cultural complexity than has usually been attributed to the area (N. Morey 1975a, 1975b; N. Morey and R. Morey 1973, 1975, 1976; R. Morey and N. Morey 1975, 1977). Large villages, the emergence of stratified chiefdoms, an extensive trade network, and the construction of causeways and earthworks in the savanna, provide indirect and corroborative evidence for a substantial pre-contact population in the area. Conclusive evidence on population size and density is still not available except by speculative inference based upon these and a number of other factors (settlement patterns, available resources, etc.), the implications of which yet remain to be fully examined.

Very little work has been done on the aboriginal populations of the llanos. Attempts to estimate the aboriginal population of the area have been few and are only indirect products of larger, more encompassing continental or regional schemes. Steward (1949: 655-68) does not isolate the llanos and the data provided are so ill-defined, contradictory and confusing as to be of no value. His *Handbook* synthesis (Steward and Faron 1959: 53) is little better, the llanos is apparently lumped with the Tropical Forest with an estimated density of 0.6 persons per square mile. Dobyns (1966: 415) merely includes the area within Marginal South America. The excellent studies of the aboriginal Co-

2. The divisions of the Orinoco River given here are somewhat different than those ordinarily encountered in the literature. In this paper the three divisions are as follows: (1) Lower Orinoco, delta to the mouth of the Apure River; (2) Middle Orinoco, mouth of the Apure River to the Atures-Maipures rapids; and (3) Upper Orinoco, above the Atures-Maipures rapids.

lombian population by Colmenares (1969, 1970, 1973), Friede (1953, 1962, 1963, 1965, 1967), and Jaramillo (1964, 1968), and Rosenblat's (1954) general estimate for Venezuela, also largely ignore the llanos. Denevan (1970a, 1970b, 1976) is one of the few who has treated the area as a unit, but even he includes it as a subregion within Amazonia. Although his estimates are the best (the only ones) we have at the moment, he classifies the entire region as "Lowland Savanna" habitat with an estimated population of 513,500 (Denevan 1976: 230). He acknowledges omission of such varying micro-habitats as floodplain and piedmont which are found in this "savanna" region. These were the most densely populated aboriginal zones and their historical importance and productivity continue to be reflected in the distribution of the contemporary population.

This paper, however, is not primarily concerned with estimating or reconstructing the aboriginal population of the llanos. It is a preliminary examination focused upon the consequences of disease, although both types of investigations are obviously interrelated. Whatever the results of demographic analyses of pre-contact population, it is apparent that they cannot rely, as most have, on figures given by eighteenth century Jesuit sources. The well-known contemporary Jesuit scholar José del Rey Fajardo (1971, I: 103-04) cautions against placing too much faith in the population figures of the conquistadors and missionaries due to their tendency to exaggerate. He notes that such important sources as Gilij and Gumilla, as opposed to many other writers, tend to emphasize the relatively small number of Indians and small size of tribal groupings in the llanos. He forgets that catastrophe befell the peoples of the llanos before the mission period, and leading the list of calamitous events was the introduction of European disease. By the time of the Jesuits, and such prolific writers as Gilij, Gumilla, and Rivero, a severe population decline had already occurred. This decline, as they were aware, continued and intensified even as they wrote. Their reports provide us with some of the best information concerning disease outbreaks. According to Humboldt (1851, II: 219), a Jesuit once remarked "The voice of the Gospel is heard only where Indians have heard also the sound of fire-arms". But if the missionaries consciously employed force in their conquest of souls, disease was their covert ally. As we shall see, where Jesuit (and other) missions went, epidemics followed soon after.

SIXTEENTH CENTURY: PROTOHISTORY AND CONTACT

Borah (1970: 179) has suggested the concept of "protohistory" to

define that time period during which the European presence in the New World was beginning to seriously affect the native populations but remained unrecorded. The sixteenth century in most of the llanos is largely a proto-historic period. Written information is minimal, restricted to a few reports of conquistadors and to accounts of events in surrounding, peripheral, regions. These documents depict a ravaged land marked by massive population displacement and decline.

At least 27 European expeditions penetrated the llanos during the sixteenth century. Few mention the presence of disease, but almost all report an area seriously disrupted with abandoned villages and frightened inhabitants. Warfare, slaving, and mistreatment of the Indians was common. The intolerant and cruel expeditionaries extracted a heavy toll, expressed in what Friede (1961: 260-61) has termed "the code of rights of the conqueror"³. That the indigenous population must have been reasonably large and well-organized is indicated by the fact that the European parties were maintained by supplies available in the villages through which they passed. These expeditions often consisted of several hundred soldiers and a varying number of black and Indian slaves who were used as shock troops. Where figures are specific it is not unusual to find that an expedition was accompanied by as many as 5,000 or more slaves (Aguado 1950, I: 322; Groot 1956, I: 206, 274). It would be surprising indeed if such large numbers of invaders were not accompanied by lethal pathogens and had not introduced them into the defenseless indigenous population.

The initial forays of Federmann (1530), Diego de Ordaz (1532), Alonso de Herrera (1535), and others, describe a well-populated, prosperous region. When the conquistadors begin to comment upon what may be regarded as the disintegration of the aboriginal system, disease is rarely mentioned. They note cases of sickness among their own men and say little about the condition of the Indians.

Reinoso and Losada in 1538, in the Apure area, followed an abandoned causeway for over 100 leagues, saw signs of old villages and gardens, but encountered no people (Castellanos 1962: 98). Espira, at approximately the same time and probably in the Casanare-Meta region, passed through empty lands and villages, unable to obtain food due to the flight of the Indians from Spanish predations (Aguado 1950, I: 203).

3. The code of rights of the conqueror: (1) the right to exact free provisions and the acceptance on the part of the Indians of the fact of conquest; (2) the obligation of the Indians to feed troops without payment; (3) the obligation of the Indians to carry equipment; and (4) the right to demand gifts from the Indians.

Soldiers and "ladino" Indians of Federmann's second expedition in 1537-1538, somewhere along the cordillera near the Upper Meta River, were stricken, and several died, from *equilencia* (Aguado 1950, I: 224; 1963, I: 231; Simón 1963, II: 71). It has been suggested that the disease was angina (*esquinencia*), but inasmuch as the symptoms may be applied to almost any illness accompanied by spasmodic and painful suffocation or spasms, the diagnosis is meaningless.

Hutten, in 1541-1542, among people described previously in a favorable light, spoke of the "brutal and bestial manner" in which the Indians lived. His men became sick, lean, and "swollen", their skin taking on an orange color, their hair falling out, and their bodies covered by a foul itch (*mange*) from which they died. The same illness affected the horses, many dying as from "dropsy", losing their hair and covered with *mange* (Aguado 1950, I: 243, 249-50; 1963, I: 251-52; Simón 1963, II: 134). The Indians are not specifically mentioned as suffering from this or other maladies, but descriptions of desolation in an area previously well occupied leads one to suspect that disease in addition to the cruel treatment of the conquerors must have been a factor.

The abandonment or depopulation of territories and villages, the illnesses which often felled many members of the European expeditions, and the various epidemics of smallpox, measles, and influenza which were raging from Mexico to Peru during this same period (Crosby 1972: 38-9; McNeill 1976: 206-09), combine to suggest that European diseases may well have been present early in the llanos. By the mid and late sixteenth century several pieces of good, indirect evidence leave little doubt that the great pestilence had arrived there.

Smallpox is reported to have first appeared in Nueva Granada in 1566. So many Indians died that entire villages disappeared. It is very probable that this epidemic was general in all of the Audiencia (Groot 1956, I: 276; Jaramillo 1968: 129-30). Several outbreaks in the following decade are likely to have been a result of this same great epidemic. It is safe to assume it swept through a locality, took its toll, and raced on to the vulnerable populations of the neighboring region. Accounts from the cities of Barquisimeto, Tocuyo, and Trujillo in 1579 indicate that the northern llanos of Venezuela must have been affected.

The province of Trujillo, when first established, is estimated to have contained some 14,000 to 15,000 indigenous males; this number had declined to between 5,000 and 6,000 (57-67%). Warfare, revolts, starvation and disease killed many and caused others to flee into the "hot lands" (i.e., lowlands, llanos). The most devastating of several epidemics was smallpox in the year 1570 (Anonymous 1964c: 164-65).

The city of Tocuyo possessed lands that extended into the llanos. By the 1570s few aboriginal inhabitants remained in the region. Many had died from such "common" afflictions as *cámaras de sangre* (bloody flux?), *viruela* (smallpox), *sarampión* (measles), and *catarros* (influenza?). Those who survived seem to have abandoned sedentary, village life. Many of the groups identified are known to have occupied portions of the llanos: Caquetío, Coyon, Ajagua, Coyba, Jirahara, Guamontoy, Camabo, and Gayon (Anonymous 1964b: 148).

Barquisimeto, north of Trujillo and Tocuyo, also had within its jurisdiction lands in the northern llanos. Described as a normally "healthy" region populated by many Indians, occasionally *viruelas*, *catarros*, and *romadizos* (colds?) killed large numbers. Axagua, Cuiba, and Caquetío, all historic groups reported in the llanos, are mentioned as victims of these attacks (Anonymous 1964a: 181, 185, 192; Herrera y Tordesillas 1945, X: 223).

Smallpox is reported for Venezuela in 1580, supposedly introduced by a Portuguese ship. Entire tribes were destroyed in the few months the epidemic endured. The "bodies were encountered by the dozens in villages, on the roads, and in the forests" (Salas 1971: 204; Alvarado 1945: 255).

What seems to have been the second major pandemic of smallpox to strike Nueva Granada, ranging from Peru to Chile and northeast to Caracas, occurred in 1587-1588. It lasted for about three years, until 1590. In Santa Fé (de Bogotá) one third of the natives died and in some areas mortality reached as high as 90% (Groot 1956, I: 342-43; Jaramillo 1968: 129-30; Simón 1891, III: 271).

SEVENTEENTH CENTURY: FIRST DIRECT EVIDENCE OF DISEASE

Late in the sixteenth and early in the seventeenth centuries a few settlements were established in or near the llanos, and mission activity intensified and expanded in the region. Despite the existence of such communities as San Juan de los Llanos (1555), San Martín (1585), Santiago de Atalaya (1588), Chámeza (1588), Pore (1588), Támara (1584), Barinas (1576), and Guanaguanare (1591) among others, very little information is available for the early seventeenth century⁴.

4. These founding dates should be regarded as approximate. Documents from many of these communities undoubtedly exist in various Latin American and European Archives. Their examination promises to bring to light much additional demographic and disease-related information.

The city of Guanaguanare (Guanáre, Portuguesa, Venezuela) was founded in about 1591 in the northern llanos, not far removed from the neighboring highland communities of Trujillo, Tucuyo, and Barquisimeto. An undated account, apparently written in 1608, remarks on the great decline in the indigenous population in the seventeen years since the first settlement. An original married male Indian population of more than 700 had shrunk to less than 150 in this brief period (79% decline). Although no groups are identified by name, the Jirahara and Guamontoy are mentioned in other portions of the text. The poor climate, maltreatment of the Indians in *encomienda*, as well as disease were believed to be contributing factors to the death rate. *Pasmo* (tetanus) and *romadizo* with *dolor de costado* (colds, pneumonia, pleurisy?) were credited with being particularly effective killers in conjunction with frequent bathing as a cure (Anonymous 1964d: 318).

The Meta, Casanare, Pauto, and many other rivers of the region were easily navigated and served as major avenues to penetrate the llanos. Early in the seventeenth century cultivators such as the Achagua occupied the banks of these streams and were subjected to severe hardship, decimated by Spanish atrocities and slaving expeditions. In 1606 hundreds of Achagua were massacred along the Meta River (Rivero 1956: 23-30; N. Morey and R. Morey 1973). In 1625-1626 the *doctrinas* of Chita, Pauto, Támara, Pisba, and Paya were established by the Jesuits in the foothills flanking the llanos of Casanare. They served as major jumping-off points for further advance into the llanos. Initial setbacks' precluded the extension of Jesuit influence into the area until about 1659 (Restrepo 1940: 53-8; Rey Fajardo 1976: 92-5, 102-22). It is from this period that direct evidence of epidemics first appears. It is no accident that well-documented cases of disease are closely correlated with the expansion of the Jesuit missions. The members of the Company of Jesus were keen observers and prolific writers and it is primarily to them that we owe much of our knowledge of the llanos, but they did not merely record the presence of disease, they contributed to it. In their zeal to carry the word of God to the heathens, they also frequently carried and introduced deadly contagions. If they protected and succored their indigenous wards from the rapacious Carib and Spanish, they also often organized them into overcrowded, poorly located settlements. The psychological implications of mission life were enormous. Traditional beliefs and behavior were denigrated, dietary patterns were modified, diverse groups were thrown together and subjected to a highly regimented, strenuous schedule of work and worship. Those who did not conform often felt the punishment of the whip (Steigmiller 1974: 311). A non-immunized population was further weakened and left

vulnerable to the ravages of disease. The fact that "Christian" Indians suffered greater loss of life than the infidels is not new. As the Stearns (Stearn and Stearn 1945: 27) have noted, "Where missionaries baptized most, there most died". The Amerindians of the llanos were not unaware of this fact.

Don Blas de Mendoza, in 1690, a resident of the Pauto valley for about 50 years, remarked that because of the high mortality from an epidemic shortly after he arrived (probably occurred about 1635-1640) only a few poverty stricken inhabitants remained (Rey Fajardo 1974: 202). Within three years of its founding in the 1650s, the small city of Punapuna suffered an epidemic in which seven of the sixteen or seventeen residents perished. The site was abandoned. The victims appear to have been Spanish, although it is possible some Achagua also died (Rivero 1956: 85).

Rivero states that a short time before the establishment of the mission of San Salvador del Puerto, between 1661-1664, over 400 Achagua died from an epidemic (Rivero 1956: 125, 203). Somewhat later, apparently about 1669, the village of San Joaquín de Atanarí was abandoned both because of attacks by Guahibo and Chiricoa and the onset of an infectious disease. The Achagua fled west to San Salvador del Puerto, but twenty days into the fifty-five day journey they came down with *viruelas*; perhaps smallpox, although large, thick pustules are reported to have broken out only on the chest and arms. These eruptions were called *cimarronas* by the Indians, *locas* by the Spanish. The padres came under suspicion until one of them also fell ill (Rivero 1956: 235-38). Tapía (1966: 173) may be referring to this same outbreak when he reports that San Salvador at one time had a population of over 1,000, but many had fled or died and only some 600 remained (40% decline).

Dates are confusing, but also in the 1660s, about 1664, the Jesuits gathered Achagua into the site of San José (San Josef) de Aritagua on a stream of the same name near San Salvador. It had originally been intended to settle them at the latter location, but they feared the sickness there. Eventually, when dysentery began to take many lives and conditions improved at San Salvador, Aritagua was abandoned (Rivero 1956: 163-65; Mercado 1966: 45-6). The practice of abandoning and reestablishing mission villages at different locations, or transferring the inhabitants, was common. It creates considerable difficulty in attempting to reconstruct the time and place of disease outbreaks.

The mission of Macaguane had scarcely been founded in 1661-1662 when its Airico occupants were felled by a horrible dysentery. It caused

havoc throughout the region, moving first from Tocaría to Pauto, then to Casanare and the village of Tame, and finally to Macaguane. It swept from the mountain foothills, along the piedmont, and then eastward into the savanna. The epidemic lasted for two months claiming more than 300 victims. Macaguane suffered a 60% mortality, only 180 survivors remained out of the 450 residents. Unfortunately, the lack of information makes even a guess at the pathogenic agent impossible. We do know that the missionaries were not afflicted, for they were suspected of causing the illness (Rivero 1956: 144-46).

It is sometimes puzzling to understand why so relatively little space is devoted to disease in the Jesuit histories and reports. Although these documents reveal its obvious importance, much more attention is given to describing the slaving and aggressions of the Carib. Certainly Carib predations were costly in human life, several hundred slaves are believed to have been taken out of the llanos annually (see below), but compared to the consequences of disease their activities were minor. Two factors seem to account for this situation. First, disease was a "fact of life" for the Jesuits. The European experience had accustomed them to such pestilence, even the incredible number of indigenous fatalities characteristic of virgin-soil epidemics. The death-toll was often viewed as God's justified punishment of the infidels. Second, and most important, disease was not a major factor in curtailing the Company's grand design. In fact, initially it contributed to their proselytizing efforts. Indigenous victims fled to the missions seeking protection and cures in the mysterious rites of the seemingly immune priests.

The Jesuits attempted to establish mission control along the Orinoco in the latter part of the seventeenth century, but they were unsuccessful due to incursions of the Carib. These Indians ceaselessly harassed and repulsed their efforts to become permanently entrenched. The major objects of this religious activity were the Sáliva of the Cinaruco River. In 1669 Padre Monteverde founded near this stream Nuestra Señora de los Sálivas. He and his assistant soon died of an unknown *peste*. They were replaced by Neira and González who founded three additional villages with Adole, Achagua, and Sáliva. An *enfermado de calenturas* (fever, malaria?) forced them to return to Casanare in 1675 (Rivero 1956: 244-48; Aguirre Elorriaga 1941: 10). They were back along the Orinoco within a few years, but continued to be plagued by disease as well as by Carib. Ortega's trip to the Orinoco found not only missionaries ill, but also the Indians, who fled in great numbers (Pedroche 1974: 191). At the beginning of the dry season, as the waters receded, about October, *pulula*, characterized as a "great quantity of

contagious diseases", especially fevers, thought to be brought by the "exhalaciones", appeared on the Orinoco (Poock 1974: 172). It is very probable that malaria is described here, although an argument might also be made for tick-borne, relapsing fever. Such seasonal fevers were common (see below). Malaria was then endemic in the llanos and in the last few years has made a significant comeback due to the appearance of a new strain of DDT resistant mosquito.

Santiago de Atalaya, near the Upper Cuisiana River, seat of government for the region of Pauto, Cravo, and Casanare was known as a "sickly land" (*tierra enfermísima*) exposed to all kinds of intermittent fevers (*cuotidianas tercianas* and *cuartanas*), probably malarial. The arrival of 200 Indians at the site in about 1676 was viewed as a particularly happy event. The original indigenous residents of the once-thriving city had either died or fled due to several outbreaks of *peste* (Cuervo 1894, IV: 176; Tapia 1966: 208-09). The illnesses were thought to be caused by the "gaseous emanations" from a nearby swamp. Supposedly, they occurred every seven years blown through the region by the prevailing summer winds (Pérez 1862-63, II: 284).

The territory of Isimena (Ysimena, Concepción de Iximena), probably in the Upía River region, was struck by a severe epidemic of *terciañas doble* and *vicho* (*bicho*) for almost a year and a half in 1682. The former may again be malaria; the latter, *bicho*, is reported by Gilij (1965, II: 71-3) to have been the most terrible and fatal disease on the Orinoco. It was a tropical (lowland) illness, non-contagious and apparently indigenous to the area. Achagua in the nearby site of Dumagua took the opportunity to flee because the missionaries were too sick to pursue them. The mortality, if any, is not recorded (Cuervo 1894, IV: 183-92).

Finally, a report from the Upper Orinoco in 1691-1692 notes a widespread illness of intermittent internal pains (*dolores de entrañas*), followed by rheumatic-like symptoms (*penosas reumas*). Many died (Aguirre Elorriaga 1941: 15; Martínez 1966: 154).

Neither Carib attacks nor pestilence could deter the Jesuits, once established in the llanos and along the Orinoco River. Despite hardships and setbacks, they persisted in their pursuit of souls. From this point of view, the eighteenth century was frightfully successful.

EIGHTEENTH CENTURY: CENTURY OF DISEASE

At the turn of the eighteenth century the aboriginal socio-cultural system of the llanos was in a complete state of collapse. Death and

destruction were everywhere. Internecine warfare was rampant. Continued Carib attacks against the missions caused the Jesuits to abandon the Orinoco River until the 1730s. In 1735 it was estimated that at least 600 to 700 slaves were sold from the llanos every year (Rey Fajardo 1971, I: 55fn; N. Morey 1977a; N. Morey and R. Morey 1975). Warfare, slaving, and disease were inextricably associated, each contributing to the growing list of fatalities and casualties of the other. Jesuit mission reports are filled with accounts of epidemics.

Shortly after 1703 Betoý from the Sarare River, and Locaca and Atabaca, probably Betoý subgroups, were convinced to move to Tame. They immediately began to sicken and die, about one-half of the total perishing. Suspecting the Christian Indians of poisoning them, they fled, only to be retrieved by the priests. Finally nine or ten surviving families, about 40 individuals, were given permission to set up their own village at a site called Casiabo (Nuestro Padre San Ignacio de los Betoýes) on the Cravo River (Rivero 1956: 350-51, 358; Gumilla 1970: 205; Rey Fajardo 1971, I: 44). Later, about 190 Betoý, including the Anibali subgroup, were added. We are told that the mission *would have had* a population of over 800 if epidemics had not taken so many lives. In 1719, within a brief period, many infants died from *romadizo* (colds?). This is probably the same epidemic reported to have occurred among the Anibali between 1719 and 1721. Another contagious disease struck the site in 1722 and was halted only by resorting to prayers and the procession of San Francisco Javier (Rivero 1956: 380, 388, 392-93).

The northern llanos seem to have been ravaged by disease during the same period. In 1710 San Francisco Xavier was founded on the stream of Agua de Culebras; over several years Masaparro, Atature, Guaranao, Guárico, and Otomaco were added to this and surrounding sites. At its peak, in the 1720s and 1730s, it had over 1,500 indigenous inhabitants, but by 1743-1745 most had died from contagious diseases and various epidemics. We know that one of these occurred in 1717-1718 (Rionegro 1918, II: 275, 278, 283, 287, 329).

Nuestra Señora del Carmen de Buria (San Felipe de Buria, Apurito), also in the northern llanos, was established in 1722 with Chiripa Indians to whom shortly after were added Atapaima. Epidemics, which seem to have occurred around 1724 (?), killed all but about eight to ten families. In 1744 Taparita and Guárico were added, but despite the excellent land the site appears never to have flourished (Rionegro 1918, II: 330; Lodaes 1929-31, I: 192, 247, 293).

In 1724-1725, Guahibo and Chiricoa from several localities in Casanare were brought into the newly created missions of Beato (Juan

Francisco) Regis de Guanapalo (Surimena), Santa Teresa de Jesús, and San José de Macarabure. At Beato Regis, barely were houses constructed and gardens planted, when illness suddenly killed 11 out of the small group of 56 (about 20%); the remainder fled. About 1727 (there is some confusion in the sources concerning the date) an epidemic of *calenturas* and *dolor de costado* (fevers and pneumonia or pleurisy?) again struck the area. Three and four burials a day were not uncommon. Illness and trouble with Spanish troops caused the Guahibo-Chiricoa to flee to Barinas (Venezuela). They remained at that site for ten to twelve years, then returned to Casanare and the Ariporo River (probably in 1737 or 1738). It appears that they may have carried with them a highly infectious disease, for many soon died, their corpses and bones littering the countryside (Rivero 1956: 415-16, 448; Rey Fajardo 1971, I: 49).

These reports of disease from the northern llanos and the llanos of Casanare in the late 1720s and the early 1730s precede the best documented and most devastating epidemic to appear in the region. Actually, there were outbreaks of at least two contagious diseases, smallpox and measles. Identification seems a certainty for they are clearly named and distinguished from one another. One seems to have followed almost immediately upon the other. Beginning in the year 1738, through 1739, and into 1740, *viruela* (smallpox) touched all the Jesuit missions and Indian nations along the Orinoco River, then came *sarampión* (measles). It is interesting that Gilij (1965, II: 70, 74-5) alone among the writers uses the term *escarlatina* (scarlet fever) rather than that of *sarampión*. It is impossible to establish the identification of a disease beyond reasonable doubt; what is usually interpreted to be smallpox may in some cases be chickenpox, and the fevers which are often reported may be symptoms of other diseases rather than of malaria. Most of our information on the great epidemic of the Orinoco comes from a Jesuit eye-witness, Agustín de Vega (1974), and the Orinoco Mission Report of 1739-1744 (Rey Fajardo 1974: 320-39). According to Vega, the Orinoco had remained free of these diseases until this time. This would seem a questionable statement at best. "They entered the Orinoco like a fire through a dry cane field. . . mortality was so great that everyday in each pueblo six or seven were buried. In part we rejoiced because it was one of the best harvests that could be hoped for eternal life, because all died after receiving baptism. . ." (Vega 1974: 104-06).

A report in 1735 indicates that at that time there were 5,951 inhabitants in the Casanare missions, and 1,316 residents in four villages on the Orinoco. The same year the Carib renewed their raiding (Gumilla

1970: 291). Disease soon curtailed the Carib raids more effectively than guns. "While the Carib were mourning their dead they did not harass us, but when the epidemic spent itself they immediately began anew" (Vega 1974: 106). The Jesuits' defense against disease was no more effective than against the Carib. When an epidemic appeared they placed guards on the roads outside of the missions in an attempt to safeguard those sites not already infected, a procedure which was successful only with adequate warning (Gilij 1965, II: 70).

In 1737-1738 a number of Yaruro fell sick from *romadizo* (colds?). Consulting their shaman, he blamed the priests and they became determined to kill them (Vega 1974: 91). We do not know the outcome of this incident, but in the following year the mission of Burari with about 500 Yaruro was founded on the Meta River. The same year 40 infants died of *peste* (?). The site was then moved to Yurepe in 1742, then to Annaveni near the Orinoco. At this locality, all became sick, many died and the remainder fled. Only 148 were returned (Gumilla 1970: 314-15; Rey Fajardo 1974: 322-23). We are not told what proportion of the original 312 migrants died rather than escaped.

The Sáliva, forming a substantial portion of the Orinoco mission population, were also among the hardest hit by the smallpox and measles outbreaks. They were clustered in at least four different villages, Santa Teresa de Jesús, Nuestra Señora de los Angeles de Pararuma, San Miguel de Bichada (Arcángel), and Nuestra Señora de los Angeles de Carichana, all founded between 1732-1734. All were decimated. In 1739-1740 400 Sáliva died at the sites of Pararuma and Carichana, among these were 120 children (Gumilla 1970: 276; Rey Fajardo 1974: 322-23)⁵. Vega (1974: 104-06) estimated that Pararuma had over 800 indigenous residents, Carichana had over 600, and the total Sáliva population was over 1,600. After the epidemic the other sites were abandoned, and he reckoned that no more than 400 survivors remained to be consolidated in the mission of Carichana in 1746. Vega was an eye-witness and actually present in the area during the epidemic; however, Gumilla was the provincial head of the missions. His figures are precise, we can assume, because he received in this capacity regular demographic (census) reports. Gumilla (1970: 314) states that there were 800 Sáliva in Pararuma, 400 in Carichana, and 200 in Xavier (?) for a total of 1,400; after the epidemic 500 were consolidated at Carichana (there is no

5. The anonymous author of the Orinoco Mission Report 1739-1744 notes only that there were 120 Sáliva deaths in 1739 (Rey Fajardo 1974: 322-23). In Román's letter to Gumilla it is stated that in 1740 some 400 Sáliva died, 120 being children (Gumilla 1970: 276).

mention of Teresa or Arcángel). While there may be some room for conjecture, Gumilla's data seem more reliable. Sáliva mortality during the first epidemic then was approximately 61% (as opposed to 75% based on Vega's estimates). The survivors no sooner arrived at Carichana than they were felled by measles, others died from dysentery, and others from starvation because they had had no time to prepare gardens. The second epidemic virtually exterminated the Sáliva on the Orinoco (Gilij 1965, I: 74-5; Gumilla 1970: 314; Jerez 1952: 115; Rey Fajardo 1966: 316; 1971, I: 59; Vega 1974: 104-06, 142-43).

The Mapoy fared little better. When the epidemics first struck, observing that the priests did not fall sick, in the vain hope of saving their lives they quickly converted to Christianity forsaking polygyny and begging to learn the mysterious power of the mass. Vega visited their village, located about five leagues from Pararuma. He found them suffering from the same malady as the Sáliva. The village was abandoned, their camps deserted, and no one remained to bury the dead. Corpses littered the ground and lay rotting in hammocks. Following a second outbreak shortly after, in 1741, he visited their village of Paruate; again he found many sick and dying. He was able to baptize a few, but those who could fled for their lives carrying their stricken kinsmen: the act of baptism had come to be interpreted as certain death (Vega 1974: 104-06; Rey Fajardo 1974: 327-28, 338-39). In a brief period of time there were at least 80 deaths (Gumilla 1970: 276).

Because of the "bad climate" many Guamo died in San Ignacio de Guamos (Marimarota?) on the Orinoco; they were anxious to leave and moved to the healthier site of Cabruta in 1739. We are provided with no additional information, but given the chaotic conditions, it is unlikely that this strategy was long successful (Cuervo 1894, IV: 207; Gumilla 1970: 273, 314; Rey Fajardo 1974: 329).

In a letter from Padre Román, on the Orinoco, to Gumilla in 1741, the cessation and some of the effects of the epidemic are noted "...the temporal and spiritual goes well in these villages; the smallpox has stopped...the women have become sterile; in a year and a half there have been only three children born in Los Angeles, nor are any pregnant women seen" (Gumilla 1970: 276; Rey Fajardo 1971, I: 59). It is curious that he expresses uncertainty about the origin of the sterility and does not connect it to the disease. The connection, of course, is not between female infertility and smallpox, but that between disease and male sterility. The decrease in birth rate is often a consequence of disease that is overlooked (Polunin 1977: 14). Achagua families at the mission of San Antonio de Anime seldom had more than two children.

The Franciscans interpreted this as a sign of infertility of the "Christian" Indians due to disease (Arcila Robledo 1950: 230). During Gilij's eighteen years in the missions (approximately 1749 to Jesuit expulsion, 1767) *only once* did the number of births exceed the number of deaths at his village of Encaramada on the Middle Orinoco (Gilij 1965, II: 69). Abortion, infanticide, and the scarcity of women (often explained as a result of the low status and treatment of women) to an extent must also be regarded as responses to the conditions, including disease, surrounding Spanish contact (Gumilla 1963: 318-19; Pérez 1862-63, II: 215, 363; Rivero 1956: 215, 253). Gumilla (1963: 486) observed that marriages between an indigenous couple often produced few or no offspring while those between an indigenous woman and a criollo or black man usually produced a great number. He explained this as "voluntary infertility" (i.e. abortion); the status of the Indian being so low and subject to hardship (even compared to the black slave) that a mother preferred to kill the infant rather than permit it to have such a life.

Román's optimistic letter stating that the smallpox epidemic had stopped was only temporarily and partially correct. As we have noted, measles and other contagious diseases continued to appear along the Orinoco River. Other sections of the llanos also continued to be afflicted with serious outbreaks. It does seem, however, that the 1738-1740 smallpox may have been the last of that particular disease. Gilij (1965, II: 69), in the area from about 1749 to 1767, *never* witnessed a smallpox epidemic (there would have been no susceptible population) and there are no further reports of its occurrence. It is also possible, although there is no evidence in the documents, that variolation and vaccination may have been practiced in the area at relatively early dates. Stearn and Stearn (1945: 54-5, 59-60) state that the former was first practiced in South America as early as 1728, and that a source of vaccine (cowpox) in animals of the Calabozo (llanos) region of Venezuela was discovered in 1803⁶.

The Franciscan mission of San Antonio de Anime in the western llanos was decimated by an epidemic of measles in the 1740s (probably 1746). Almost 200 Pami, young and old, died. Mortality among the Enagua, Achagua, Gavilan, Colorado, and Zorro brought the total to

6. Walker (1822, I: 97-98) states that after the great smallpox epidemic of 1766 in Caracas the practice of inoculation became general. Mendinueta (1803: 464) reports smallpox epidemics in Bogotá in 1782 and 1802. In the latter outbreak, 96 of a total of 814 patients admitted to various hospitals contracted the disease from inoculation. Only one of the inoculated patients died compared with 718 of the non-inoculated

approximately 300 victims. Many fled to the forests where they succumbed without burial. By 1750 only about 161 inhabitants remained at the mission. Unfortunately, we do not know the original number of inhabitants (Arcila Robledo 1950: 230; 1953: 369-70).

It appears from Gilij (1965, I: 70) that the Jesuits attempted to escape the Carib and epidemics by establishing their sites some distance from the main rivers. The first such village was San Estanislao de Patura founded around 1750; it scarcely survived five years. Other attempts also failed, and the policy was forgotten. Only scattered reports of illnesses are found in the last half of the eighteenth century, very few seem to reflect infections of epidemic dimensions. The absence of a susceptible host population and the lack of Jesuit reports after their expulsion in 1767 are probable explanations.

Gilij (1965, II: 68-9) notes that the natives were "very sickly" and rarely did they pass a year without fevers; many died from *fiebres tercianas y cuartanas*. These appeared annually, at the beginnings of the wet and dry seasons (the lowering of the rivers and the return of the rains)⁷. A major symptom accompanying the fever was *solturas de vientre* (weak stomach, given to vomiting?). This illness could go through a village like an epidemic reducing its victims to skin and bones, "like corpses that breathe"; if the vomiting (?) included blood only a miracle could save the person's life.

Bloody flux (*disenterias comunes y con sangre*), yellow and black vomits (?)⁸, yellow jaundice (*ictericia amarilla*), painful swellings or sores (*hinchazones*), venereal disease (*venéreas*), influenza (*catarros*), pleurisy (*pleuresía*), various eye and skin diseases, were common and sometimes fatal (Gilij 1965, II: 69-73; Rey Fajardo 1971, I: 104-05).

Syphilis, often difficult to identify or confused with other disorders, is reported to have been common. *Mal gálico* as it was usually termed was said to have been as common along the Orinoco as in Italy. The "Italian disease" or the "disease of Naples" was particularly prominent among the Carib, so much so that their Tamanaco neighbors said they "owned" the disease. There seems to have been no question but it was pre-Columbian in origin (Gilij 1965, II: 70, 75, 297-98). A trip by Alvarado sometime after 1746 to the village of San Francisco de Bora describes the area as unhealthy and the Yaruro as suffering from

7. Gilij (1965, II: 69) himself had a fever which lasted off-and-on for six years. He reports that it always recurred *precisely* in the month of September, i.e. the beginning of the dry season in that locality.

8. *Vómito prieto*, black vomit, was also a term given to yellow fever (Walker 1822, I: 51; Duffy 1972: 138).

mal gálico, covered with "tumors and pustules" (Jerez 1952: 116; Rey Fajardo 1966: 319). The Ature and Maipure were also much afflicted with it; supposedly, it was rare in the forests but increased in the missions (Rey Fajardo 1966: 322; Gilij 1965, II: 120).

In addition to *bicho* (above) and syphilis, *araguato* was also believed to have been of indigenous origin. It sounds strangely like whooping cough. According to Gilij (1965, II: 75-6; Rey Fajardo 1971, I: 104-05), after sweeping through the Americas it arrived on the Orinoco in the last years of his stay (1760s). Villages were decimated. The symptoms were a convulsive cough and a high fever. The name apparently derives from (it is identical to) that of the howler monkey.

A visitor to the Franciscan mission of Santo Ecce-Homo in 1750 found 108 Cumanigua: 33 men, 34 women, 29 boys and 12 girls. Many had died or fled from a measles outbreak, probably the same one that had affected the mission of Anime in the same area (Arcila Robledo 1950: 229).

The priest Bartolomé de Leal took possession of the mission of San José (near the Santo Domingo River, Venezuela) in 1762. He found 700 Achagua "whose number did not increase because of the many epidemics which the land suffers" (Zamora 1945: 544).

The same year the Jesuits were expelled, 1767, the Beto mission was moved because of *viruelas* (a localized outbreak of smallpox?) to a new site of Nuestra Señora del Buen Viaje de Casiago (Cuervo 1894, IV: 317).

In 1778 Villa de (Cariben) San Carlos del Meta, at the mouth of the Meta River, had barely begun. It was visited by Don Fernando Miyares who found it not yet consolidated because of a *peste of calcen-turas* which had affected the "spirit" of the few residents (Lodares 1929-31, I: 281).

Bueno, a Franciscan missionary on the Upper Orinoco, in 1788 brought over 30 Arenacoto to the village of Aripao. All died but one young boy; although he does not state the cause, the implication is clearly an epidemic (Bueno 1965: 134).

San Nicolás de Buenavista, established on the Meta River by the Franciscans in 1792, consisted of Amarizana of Jiramena who fled because of *peste* which was destroying them (Cuervo 1894, IV: 405-11).

The fragmentary reports indicate that in the latter half of the eighteenth century conditions were bleak in the llanos. Sporadic disease outbreaks continued to occur in the near-moribund missions. The epidemics of mid-century and the expulsion of the Jesuits in large part

brought an end to the active period of proselytizing in the llanos. The missions were abandoned or taken over by members of the Franciscan, Augustinian, and Capuchin Orders. We owe our knowledge of the area in the late eighteenth and nineteenth century, not so much to these priests as to the secular travelers, explorers, and residents of the llanos.

NINETEENTH CENTURY: FINAL DECLINE

From the European point of view, the colonial era was a time of expansion and growth in the llanos. But early in the nineteenth century (1810) the area was plunged into chaos: first with the war against Spain, then by a continuing series of insurrections and revolts connected with the formation of Gran Colombia and, finally, the modern states of Nueva Granada (Colombia) and Venezuela. Settlements, ranches, and missions disappeared and the region sank into a long period of stagnation from which it is only beginning to re-emerge today (Loy 1974; N. Morey 1977b). Our knowledge of the Amerindian population during the nineteenth century is in many ways comparable to that of the sixteenth century. Reports are few and often indirect. However one fact is clear, it was not a peaceful interlude of respite for the indigenous inhabitants.

On the first leg of his famous South American journey, Baron Alexander von Humboldt traveled into the llanos and along the Orinoco River. His observations provide us with most of the information for the early nineteenth century and reveal the dilapidated state of the once-thriving missions.

At the turn of the century in 1800, Humboldt visited many of the ex-Jesuit Orinoco mission sites and described the general conditions and activities of their indigenous residents. He reports that epidemic fevers (probably malaria) occurred at the beginning of the rainy season and were especially prevalent at the villages of Atures and Maipures near the rapids of the Middle Orinoco. They were thought to be the result of the "pestilent exhalations" rising from the rocks. An outbreak of fever (?) resulted in considerable mortality at Carichana, on the banks of the Meta River, and at Atures. The Indians of San Juan Nepomuceño (Atures, El Raudal) were so sick in 1800 (?) that they were unable to leave their hammocks (Humboldt 1851, II: 241-42, 489). Bueno (1965: 164), apparently alluding to related disease events, states that in the mission of Uruana (Urbana) *fiebres catarrales* (colds, influenza?) killed five in 1801.

We know of a smallpox epidemic in the Colombian highlands, in

1801 near Popayán and later in the area of Bogotá. It was not especially virulent (Groot 1956, II: 415-16, 420). There is no evidence of its occurrence in the llanos. Should it have appeared, it could not have been sustained for long among the few, scattered inhabitants of the region. Humboldt (1851, II: 248) attributes the depopulation of the Orinoco, previously the most densely occupied zone, to five factors: the "repugnance" of the Indians for mission regulations, the unhealthy climate, malnutrition, lack of care for the diseases of children, and the frequent practice of abortion. Even overlooking the ethnocentric attitudes of the observers, one is left with a depressing picture of desolation. During the wars of independence mission Indians were even conscripted into the Republican army (Anonymous 1827: 92).

A fragmentary note from the site of Cabullare on the Túa River in the western llanos (Meta-Casanare) in 1811 indicates similar conditions were to be found throughout the region. The settlement was deserted, without a priest, because of its *calenturas* (Cortés de Madariaga 1964: 504).

An 1842 account from San Fernando de Atabapo on the Upper Orinoco, adjacent to the Colombian llanos, states that the previous Indian population had become extinct, only to be replaced by new groups who were demoralized by the harsh treatment of the criollos. They "diminished daily both from death and from lack of births /from abortions/" (Canedo 1967: 327-28).

Records of what was probably one (or possibly two) of the worst epidemics in the nineteenth century do not identify the disease or mention its effect upon the indigenous inhabitants (Páez 1863: 81-3, 265). This unknown illness seemed to have attacked every living creature in its path. It decimated the Spanish and animal population of Apure. The exact year of the outbreak is also uncertain, but it was probably about 1832. Páez (1863) states that even at the time of his trip to the llanos in 1864 the área had not fully recovered. Fevers were common and horse raising had been abandoned. Mantecal, a once-flourishing town, remained depopulated. The Llaneros believed the disease to have been caused by the blasphemy of a rancher (i.e. a punishment of God) or by the "decomposition of vegetable detritus" at the headwaters of the Apure River. The first symptoms appeared among the caimans. They were seized with a violent fit of coughing, then a black vomit, followed quickly by death. Fish were the next victims. The pestilence was so deadly that for over a month decaying fish covered the surface of the Apure. *Chigüires* (cabybaras) and wild boars, before expiring, were incapacitated by paralyzed hind-quarters. This characteristic paralysis gave

the disease its name, *derrengadera*. Monkeys, humans, and the thousands of horses roaming the open range were also afflicted. Mysteriously, donkeys and horned cattle were seldom casualties⁹.

This affliction may be the same one mentioned in a report by a Capuchin priest in 1843, although he indicates the epidemic took place some 30 years earlier (ca. 1813). Thus we may be dealing with two outbreaks. Apure, in the padre's times, was said to have had a population of approximately 30,000 criollos. This represented a substantial decrease, and the country was much less healthy than before the great disease (Lodares 1929-31, I: 352).

As late as 1889 a measles outbreak resulted in several deaths and the abandonment of indigenous villages along the Vichada River (Vela 1935-36, III: 220). Even in the early twentieth century travelers continued to remark upon the unsanitary conditions and prevalence of diseases such as malaria, typhoid, and yellow fever in the llanos (Furlong 1914: 814).

Humboldt (1851, II: 484) relates a somewhat humorous, but melancholic incident that sums up rather nicely the fate of many Amerindian peoples of the llanos. At the rapids of Atures on the Middle Orinoco River, once the center of the territory of the Indian nation of that name (i.e. Atures), he came across an old parrot that spoke a few incomprehensible words. No one could understand the bird, "because it spoke the language of the Atures". The last speaker of the Atures language was a parrot! .

SUMMARY AND CONCLUSIONS

The data, not suprisingly, leave little doubt that disease had a tremendous, far-reaching impact upon the aboriginal population of the llanos. The exact extent or magnitude of this impact, however, is almost impossible to assess. The lack of good quantitative information is complicated by a number of related factors. These represent problems which are not unique to the llanos nor to lowland South America, but I should imagine are exacerbated in tropical regions because of their historic isolation and the comparatively little attention given them by Europeans. Perhaps first in importance is the obvious fact that those figures which are available apply only to a small segment of the regional population, in most cases indigenous people incorporated into the mis-

9. In a brief open discussion following the presentation of this paper, it was suggested that the circumstances surrounding the *derrengadera* outbreak may indicate a case of water-borne pollution rather than an epidemic disease. This intriguing possibility remains to be verified.

sion system. The consequences of disease for the majority, the non-missionized, so-called "forest Indians", are ignored in the reports. In the few cases where enumeration of deaths from disease are given, seldom are such associated events as flight, warfare, maltreatment, and starvation taken into account in estimating local or regional declines. Age and sex ratios in relation to mortality rates are non-existent, and even the particular indigenous group afflicted is often difficult to determine. The task is not made easier in the llanos by the frequent practice of placing several distinct groups in the same mission and transferring locations or mission inhabitants while retaining the original site name. For example, several Jesuit missions within a brief period occupied as many as four or five different sites. A group was often transferred (see instances above of Sáliva, Yaruro, and Guamo) because of climate, disease, internal problems, or any number of other reasons. In addition to these difficulties, the identification of disease or disease agents is by no means a simple task. In many cases only the presence of an epidemic is mentioned; in others, only the disease name and/or symptoms are stated. *Viruelas*, although clearly identified in some cases as smallpox, and making the assumption that the Europeans knew this terrible scourge above all others, can be a term applied to a number of skin disorders, including measles and chickenpox as well as a symptomatic condition of other illnesses or parasitic infections. The same is true for *disentería* (*cámaras*) or *fiebres* and *calenturas*. These are common symptoms for many sicknesses in a region where into this century (Florez 1919), and even today, such diseases as amoebic and bacillary dysentery, malaria, and relapsing fevers, if not endemic, are at least frequent.

It was not, of course, the primary purpose of the Europeans, particularly the missionaries, to record such data. That they have provided us with any information at all is fortunate. Their inattention or indifference to material that we now consider crucial should not, however, be considered solely the result of ignorance. They were men of their times, but at times extremely perceptive. They were not unaware that the "sickly nature" and short life span of the Amerindian were directly related to diseases introduced by the Europeans. Gilij (1965, II: 74-5) noted that in addition to the blessings of the Catholic faith and manufactured goods, disease was also a European gift. Several of the early sources remark upon the apparent correlation between the occurrence of "fevers" and the presence of swamps or marshes, mosquitos, and the seasonal change in precipitation. This was long before the nature of malaria and some of the relapsing fevers was discovered and clearly understood. They brought the Indians diseases, contributed to their

mortality by organizing them into missions, but also attempted to protect them by the use of indigenous medicines and applying, as well as they knew them, the methods of prevention of their own culture (i.e. quarantine). Unfortunately, they were more concerned with eternal life than earthly existence.

Recognizing the problems inherent in ethnohistoric study and the role of the Europeans (missionaries), what can be surmised about the impact of disease upon the native inhabitants of the llanos? With only the most general estimate available for the aboriginal population, indeed with only estimates yet available for the contemporary population, in the absence of all but minimal archaeological, anthropological and historical studies of the region, what can or can not be said?

The first, limited reports concerning the llanos describe a region already disrupted by Europeans. Large areas were depopulated and indigenous societies displaced. Diseases ravaged the indigenous people in the mountain areas surrounding the llanos and soon appeared along the northern and western edges of the llanos. From the northern and western llanos they spread into Apure, Casanare, and finally to the Orinoco. This reflects not so much the route of transmission as the presence of European reporters. Disease was probably introduced into all of these zones prior to any substantial European penetration. As European activity increased, particularly that of the missionaries, so did mortality. Weakened by warfare, slaving, and general disintegration of their traditional ways of life, the indigenous peoples of the llanos were defenseless in the face of new and lethal pathogens. The most devastating of these diseases appear to have been smallpox, measles, malaria, and perhaps influenza. The limited data available indicate that many outbreaks were marked by high mortality, and an overall decline in the regional population, during the eighteenth century alone, of between fifty and sixty per cent is probably conservative.

The indigenous population of the llanos did not completely disappear; a few, perhaps 20,000 in the area we are considering, have managed to survive into the present century. They represent the remnants of many societies that existed at the time of European contact. Disease was not the only factor in their destruction, but was certainly as important and "more efficient" than warfare or slaving in population decline. When we move beyond mere mortality rates to consider the psychological and cultural consequences of the epidemics the implications are overwhelming. Considering the devastation, we shall probably never be able to fully comprehend the richness and diversity of aboriginal American cultures before the Europeans arrived.

Describing the anthropological study of hunting societies, Gray once characterized it as "an inquest into the corpse of one society presided over by members of another" (Sahlins 1972: 8). This metaphor might be extended to include anthropology in general and ethnohistory in particular. With few exceptions, ethnographers are too far removed from the "scene of the crime" to provide anything but distorted descriptions of aboriginal cultures. While we can rely upon ethnographic analogy and archaeology to provide us with information about Amerindian life prior to European contact, it falls to the ethnohistorian to reconstruct as closely as possible the circumstances surrounding the "death of the victim". In lowland tropical regions such as the llanos a great part of the evidence is circumstantial, but we can be certain that a crime did take place and that disease was a major weapon.

ABSTRACT

This paper is a preliminary examination of the impact of disease in the Colombian and Venezuelan Llanos of northern, lowland South America. Ethnohistorical documents reveal that recurrent epidemics, especially during the eighteenth century, had devastating and far-reaching demographic and cultural effects upon the indigenous inhabitants. The Jesuit mission system was a major instrument in the spread of disease. Epidemics contributed to warfare, slaving, population decline and cultural disorganization that marked the destruction of this once prosperous region.

RESUMEN

Esta contribución es un análisis preliminar del impacto de las enfermedades en los Llanos de Colombia y Venezuela. Los documentos etnohistóricos revelan que las repetidas epidemias, especialmente las que tuvieron lugar en el siglo XVIII, produjeron impactos devastadores, tanto demográfica como culturalmente, en las poblaciones indígenas de la zona. El sistema de misiones jesuitas fue uno de los instrumentos más importantes para la difusión de las enfermedades. Las epidemias contribuyeron a la guerra, el tráfico de esclavos, la baja de la población y la desorganización cultural, fenómenos éstos que marcaron la destrucción de esta región otrora próspera.

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