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***Ethnic Survival and Extinction on the Mission Frontiers of Spanish America: Cases from the Río de la Plata Region, the Chiquitos Region of Bolivia, the Coahuila-Texas Frontier, and California***

The arrival of Europeans in the Americas resulted in drastic population changes including demographic collapse and the virtual biological and cultural extinction of some native groups. Many native polities disappeared in the centuries following 1492, and in particular small bands of nomadic hunters and gatherers proved to be fragile when exposed to newly introduced disease, engaged in war, or brought into exploitative colonial or dependent economic and labor systems. Other native populations, especially sedentary agriculturalists with large populations, experienced declines in numbers but also experienced subsequent population growth and ethnic survival.

On the frontiers of Spanish America, missionaries from different Catholic orders established missions to evangelize native peoples, and to initiate a program of directed social, cultural, and economic change. In places such as central Mexico and the Andean Highlands of South America, the Spanish encountered sophisticated native societies of sedentary agriculturalists living in hierarchical state systems. The natives paid tribute to the government and provided labor services for projects such as road construction and the erection of temples. The Spanish modified the existing system of tribute and labor drafts for the generation of wealth. On the frontiers of the empire, on the other hand, the Spanish encountered native peoples who were not sedentary agriculturalists, or did not live in hierarchical state systems. The mission programs attempted to transform native peoples to conform to policy objectives,

and radically change native society. However, natives brought to live on the missions experienced population losses or even ethnic extinction resulting from disease, and other factors. Not all native groups brought to live on missions, however, experienced cultural and biological extinction, and, as a general rule, populations of hunter-gatherers fared poorly on the missions when compared to peoples who were sedentary agriculturalists living under clan or tribal governments.

This essay outlines in a comparative fashion demographic patterns and ethnic survival and extinction on missions on four different frontiers of hunter-gatherers and sedentary agriculturalists. It examines four groups of missions. The first are the missions established on the north Coahuila frontier near the Rio Grande River by Franciscans. The Grey Robes initially founded three missions in the neighborhood of San Juan Bautista presidio: San Juan Bautista; San Bernardo, and San Francisco Solano. In 1718, the Franciscans relocated San Francisco Solano to the San Antonio River in Texas, and renamed it San Antonio de Valero. The missionaries relocated neophytes from San Francisco Solano to the new site. They congregated bands of hunters and gatherers on the other two missions San Juan Bautista and San Bernardo.

The second case study comes from the California mission frontier first opened in 1769 with the establishment of San Diego mission, also by the Franciscans. Over the next six decades the Franciscans extended the chain to include twenty-one missions, located on or near the coast. The discussion of demographic patterns focuses on two of the missions, San Carlos (est. 1770) and Santa Cruz (est. 1791), located on different ends of Monterey Bay, that exemplify demographic patterns within the larger region.

The other examples are two Jesuit mission frontiers in South America, in Paraguay and the Chiquitos region of eastern Bolivia. After 1610, the Black Robes founded what eventually numbered thirty communities of Guarani called **reducciones** located in what today are southeastern Paraguay, northeastern Argentina, and western Rio Grande do Sul, Brazil. The Guarani were sedentary agriculturalists who lived in villages governed by clan chiefs. This essay examines demographic patterns based on the case study of Los Santos Mártires del Japón, one of the missions located in what today is Misiones, Argentina. The fourth is the Chiquitos mission frontier of eastern Bolivia. The Jesuits established the first mission in the region in 1691, and the number of establishments reached ten prior to the expulsion of the Black Robes in 1767/1768. These were multi-ethnic mission communities with populations of sedentary agriculturalists that spoke different dialects and languages. Unlike the missions in northern Coahuila, the missions in the Rio de la Plata and Chiquitos regions survived as autonomous native communities following the expulsion of the Jesuits.

### ***The Northern Coahuila Frontier***

The Franciscans opened the Coahuila mission frontier in the mid-1670s, in response to requests for the establishment of mission communities by natives employed on Spanish haciendas in the San Bartolome Valley in Nueva Vizcaya. The natives sought missions as an alternative to exploitation on Spanish estates that supplied mining camps in the region.<sup>1</sup> The Coahuila missions occupied several sites during their history, and experienced instability as congregated natives came and went and as the Franciscans congregated different ethnic groups to repopulate missions. In 1746, nine missions had a

total population of 1,636.<sup>2</sup> San Juan Bautista and San Bernardo, the two communities located in the vicinity of San Juan Bautista presidio, counted the largest number of neophytes.<sup>3</sup>

Between 1699 and 1703, the Franciscans established three missions near San Juan Bautista presidio not too far from the Rio Grande River: San Juan Bautista, San Bernardo, and San Francisco Solano. The missionaries relocated the missions several times, and in 1718 transferred San Francisco Solano to the San Antonio River and renamed the establishment San Antonio de Valero. The populations of the remaining missions San Juan Bautista and San Bernardo fluctuated with the pace of congregation of new recruits. In 1727, for example, the population of San Juan Bautista counted thirty non-Christians, and San Bernardo thirty-five. A decade later, in 1738, the numbers of non-Christians numbered sixty and 347 respectively at San Juan Bautista and San Bernardo.<sup>4</sup> Similarly, the populations of the two missions declined in the second half of the eighteenth-century, and only 125 remained in 1797. The instability and demographic decline of the mission populations can be shown in another way. In 1777, Agustin Morfi, O.F.M. reported that the missionaries had baptized 1,618 and buried 1,073 since the founding of the mission in 1702, with a net difference of 545. However, the population of the mission was only eighty at the time of Morfi's inspection and report, clearly indicating that many neophytes had chosen to not remain on the missions. The missionaries at San Juan Bautista baptized 1,434 natives between 1699 and 1761, but again the population of the mission was small compared to the total number of natives baptized.<sup>5</sup>

Censuses and a set of sacramental registers for San Francisco Solano-San Antonio de Valero recorded the names of different bands congregated on the missions, groups that are now biologically and culturally extinct.<sup>6</sup> Ethnohistorian T.N. Campbell identified 53 names of different bands in the registers of San Francisco Solano, including names also noted in reports of early expeditions into northern Coahuila and Texas in the last decades of the seventeenth century.<sup>7</sup> The most numerous groups included the Xarame with 98 observations in the sacramental registers, the Terocodame with 73, and Babor with 30. Censuses noted the presence of varying numbers of band members. In 1772, for example, the most numerous group at San Bernardo was 85 Pacuache. Nearly forty years earlier, in 1734, a census reported on five Pacuache at the same mission.<sup>8</sup> Censuses prepared in 1727 noted that the most numerous bands at San Juan Bautista were the Mexcales, Filijayes and Pastalocos, and on San Bernardo the Paquaches, Pastancoyas, Pachales, and Pamaques. In 1738, the population of San Juan Bautista included 92 Mexcales, 71 Pastalocos, 37 Filijayas, nine Pamponas, 27 Pitas, and 2 Bozales.<sup>9</sup>

Bands of hunters and gatherers proved to be fragile demographically. Overall populations were small, and deaths of adults and particularly women of child bearing age from disease and other causes significantly reduced the ability of the populations to recover and grow. The 1727 censuses for San Juan Bautista and San Bernardo recorded the number of burials from the foundation of each mission to the preparation of the census. A total of 207 adults and 157 children had died at the first named establishment, and 156 and 117 at the second.<sup>10</sup> The loss of children reduced the size of the next generation, and

deaths of adult women of child bearing age limited the ability of the population to reproduce. Finally, evidence from a census of San Juan Bautista prepared in 1706 suggests a gender imbalance, with more males than females. In the year the population of San Juan Bautista totaled 153, but of this only 43 percent were girls and women.<sup>11</sup> Later population counts do not record figures that allow for a reconstruction of the gender structure, but with small populations and few women of child bearing age prospects for growth through natural reproduction were low at best.

### ***The California Mission Frontier***

The native peoples living on Monterey Bay were hunters and gatherers of wild plant foods, but the abundance of the staple acorn made it possible to occupy permanent village sites or to occupy seasonal villages. Junipero Serra, O.F.M. established San Carlos mission in 1770, and the Franciscans founded Santa Cruz twenty-one years later in 1791. The sources used for the analysis presented here include the registers of baptisms and burials maintained by the Franciscan missionaries, as well as detailed annual reports.<sup>12</sup> The Franciscans assigned to establish mission communities in California implemented a policy known as ***congregacion***, which was also the policy on the Coahuila missions. This entailed the relocation of indigenous populations to a community designated by the missionaries, in this case the communities established by the Franciscans themselves. The congregation of native peoples to San Carlos mission roughly lasted from 1770 until the first years of the nineteenth-century. There were years of baptisms of large numbers of new recruits, and banner years included 131 in 1773, 148 in 1783, and 110 in 1785. The last

surge of resettlement was in the years 1801 to 1808, and in the year 1806 alone the Franciscans baptized 71 new converts (see Figure 2).<sup>13</sup>

The Franciscans stationed at Santa Cruz congregated Indians from the coastal region north and south of the mission, but in the early decades of the nineteenth-century looked to the interior valleys for new converts. Between 1810 and 1835, the gray robes baptized some 526 Yokuts from the San Joaquin Valley.<sup>14</sup> The population of the mission fluctuated, but until the late 1820s the numbers fluctuated between around 400 and 500. The largest recorded population was 523 in 1796, during the first phase of congregation of natives living on villages fairly close to the mission. It reached a second peak of 519 in 1821, with the influx of Yokuts from the San Joaquin Valley (see Figure 3).<sup>15</sup>

The mission population fluctuated with the ebb and flow of resettlement on the missions of non-Christians, called gentiles by the missionaries. However, until the last decade of the eighteenth-century the trend in population movements was upwards. The highest recorded population for San Carlos was 876 in 1795. As the number of new converts congregated on the mission declined after about 1800, the mission population dropped. In 1800, the numbers stood at 747, already showing a net loss of 129 over a period of only five years from the high recorded in 1795, 381 in 1820, and 165 in 1834 on the eve of the implementation of the secularization of the mission. Similarly, the population of Santa Cruz mission dropped rapidly from 519 in 1821 during the last phase of relocation of non-Christians to the missions, to 238 in 1834.<sup>16</sup>

The goal of the government was to create stable indigenous communities along the lines of the communities of central Mexico. The new native communities were to be inhabited by sedentary peasants who were to pay

tribute and provide labor through labor drafts organized by the government. The communities were also to be politically autonomous, with a Spanish-style municipal government. The control over the indigenous neophytes exercised by the Franciscans was to be temporary, pending the religious conversion and enculturation of the neophytes. In theory and by law, based on experience in central Mexico, the tenure of the Franciscan missionaries was to last only a decade. However, in reality the Franciscans justified prolonging their control over the missions well beyond ten years on the grounds that they continued to congregate non-Christians to the missions.

The congregation of natives on San Carlos and Santa Cruz missions had a direct relevance to the larger issue of indigenous demographic patterns. The very act of bringing large numbers of people together to live in closely confined quarters greatly facilitated the spread of contagious crowd disease such as measles. Moreover, given the medical knowledge of the time, the Franciscans made inadequate provisions for sanitation and clean water. Finally, the sites of San Carlos and Santa Cruz are subject to fog, and the cool and damp weather created additional chronic health problems for an unhealthy population. In particular, respiratory maladies probably were common at the mission. Syphilis also was a problem on the California missions that damaged the health of the natives.

The construction of 93 new adobe housing units for native families in 1806 and 1807 created new problems for the mission population at San Carlos, as also was the case at Santa Cruz in the same years.<sup>17</sup> Prior to this time, the neophytes had lived in traditional conical grass/reed huts that could be burned and easily replaced if they became too dirty. Moreover, the traditional huts were

built in a random pattern, whereas the adobe houses were also built on a grid pattern, were built close to each other, and could not be destroyed when they became too dirty. The compact settlement pattern also facilitated the spread of contagious disease. Furthermore, the annual report from 1831 reported the deterioration of many of the Indian housing units, most likely because of the damp climate and shortage of labor to maintain the roofs and white wash the buildings. This raises the question of how habitable the Indian housing actually was.

Once congregated in the missions, the Franciscans hoped to transform the natives into stable Christian families. However, high death rates that were consistently higher than birth rates rendered the population inviable, which meant that the population did not grow through natural reproduction (see Figures 4 & 5). Indian women did have children, and birth rates tended to be moderate to high. However, death rates were chronically high and were particularly high among children and women of childbearing age. This has a direct bearing on fertility, since the pool of potential mothers generally dropped which boded poorly for the long-term survival of the native population.

Life expectancy for children born at the mission was also very low, and was lower than ten years at birth during most of the history of the mission community. As long as the Franciscans recruited and resettled natives from outside of the mission, the mission population grew. However, over the long run the mission population proved to be unstable because most children died before reaching adulthood.

Data from the extant annual reports also show an imbalance in the age and gender structure of the mission population. For most of the history of the

mission there was a gender imbalance, with more males than females. This is critical for understanding the inability of the mission population to reproduce, since the pool of potential mothers was small. Moreover, given the low life expectancy at the mission, the gender imbalance suggests that women of childbearing age also died young. In a “normal” population there should be a balance between males and females, or slightly more females. The population of San Carlos shows that the percentage of females in relation to the total population was less than half, and was as low as 43 percent in the late 1820s. At Santa Cruz, women and girls constituted less than a third of the total population by the early 1830s (see Figure 6). Between 1791 and 1832, the Franciscans stationed there baptized 1,133 females. In the last named year, however, only eighty-seven women and girls survived, only eight percent of all the females baptized over a period of forty-one years and only thirty-one percent of the total population of the missions.<sup>18</sup> Given the small size of the mission population by the 1820s, there was also considerable fluctuation in the relative number of males and females.

The age structure was equally skewed, again reflecting low life expectancy. Young children, defined by the Spanish as *parvulos*, also made up a relatively small percentage of the mission population. This fluctuated, but reached a nadir of below 15 percent around 1810 as the resettlement of new recruits lagged off. The percentage actually increased after 1814, and the rebound reflected a moderate improvement in mean life expectancy with a decline in the mission population. Young children increasingly formed a small percentage of the population of Santa Cruz, and the figure reached around ten to eleven percent in the early 1830s.

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How did demographic patterns on the north Coahuila and California mission frontiers compare to patterns on missions established among sedentary agriculturalists? The following sections look at one of the missions established by Jesuits in the Province of Paraguay, Los Santos Mártires del Japón. This mission community was unique among the Paraguay missions, but at the same time manifested patterns common to all thirty of the establishments in the region. The populations were larger than those of the northern Coahuila missions, and they recovered and grew again following severe epidemics unlike the Coahuila missions. The second group is the Jesuit missions of Chiquitos located in what today is eastern Bolivia, founded by the Black Robes between 1691 and 1755. These establishments were geographically isolated, and did not experience the high mortality rates during epidemics as was the case in the Paraguay mission communities. Unlike the Paraguay missions, the Chiquitos missions were still active congregations, meaning that the missionaries continued to bring non-Christians to live on the missions. In this regard the Chiquitos missions were similar to those on the north Coahuila frontier and California.

### ***Los Santos Mártires del Japón Mission (Argentina)***

The development of Los Santos Mártires mission site had a direct bearing on demographic patterns on the mission. The mission occupied three sites during its history. The Jesuits initially founded the new community in the region east of the Uruguay River in 1628. They relocated the mission to a new site in the late 1630s in response to raids by slave traders from São Paulo, just west of the Uruguay River between Concepción and Santa María la Mayor. The Jesuits relocated the mission to a new and final site in 1704.<sup>19</sup>

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The decision to relocate Los Santos Mártires mission in 1704 was most likely related to heightened tensions between Spain and Portugal during the War of Spanish Succession [1701-1713]. Portugal was allied to England during the conflict. The new site can best be described as having been chosen for defense. The Jesuits selected the crest of a strategically located hill that could help defend the missions or serve as a place of refuge in case of Portuguese attack. The Black Robes established two other missions at strategic locations during the course of the war: Trinidad and Santo Ángel Custodio.

The Jesuits expended considerable labor in developing the mission at the new site. The main group of buildings that included the church and cloister were constructed on an artificial terrace protected by a wall. At its deepest point the terrace measured six meters deep. A contemporary diagram also shows the presence of bodies of water (*aguadas*) very close to the housing of the Guarani residents of the missions. Mosquitoes most likely bred in these bodies of water, and may have spread a variety of diseases such as malaria or yellow fever.<sup>20</sup> If this hypothesis is correct, chronic maladies spread by mosquitoes might account for several patterns that were unique to Los Santos Mártires, such as a gender imbalance with more men than women and high mortality and even net population loss in non-epidemic years. A comparison of crude death rates at and nearby Santa María la Mayor in non-epidemic years shows an average of 36.8 per thousand population at Santa María as compared to 58.0 at Los Santos Mártires. In the year 1756, for example, the crude death rate was an estimated 38.0 at Santa María, and 101.7 at Los Santos Mártires.

The population of the mission grew during the course of the seventeenth-century, following the relocation of the community to a site west of the Uruguay

River in the late 1630s. In 1643, 1,040 Guarani lived on the mission, and the numbers increased to 1,980 in 1682, 2,371 in 1691, and 2,124 in 1702, two years before the relocation of the missions to its final site in 1704. In 1731, the population totaled 3,874, just prior to the first of three epidemic outbreaks during the decade. At the end of 1739, and following the three epidemics, the population declined to 2,777.<sup>21</sup>

A detailed tribute census prepared in August of 1735 provides a detailed look at the population of the mission, and the effects of epidemics on the mission population. There are several indications of heavy mortality from the first two epidemics during the decade. There were a large number of orphans, a total of 129 boys and 131 girls. Moreover, an analysis of the actual family size shows that the majority of families consisted of a married couple (35 percent), or a couple with one (28.3 percent) or two children (19.4 percent). If this structure had persisted over time, the population of the missions at best would have remained stable with minimal growth, or perhaps would have declined (see Table 9). Moreover, it suggests heavy mortality among children during the epidemics in 1733 and 1735. Data from 1733 shows that the crude death rate was 124 per thousand population, or slightly more than twelve percent of the population died during the year. Deaths were higher among parvulos, generally under ten years of age, than adults. A total of 491 Guarani died on the year between 154 adults and 337 parvulos. The net decline in the number of children was 135.

The census recorded the population divided into cacicasgos, and there was a total of 35 caciques who governed populations of different sizes (see Table 10). The largest was the Quaratimivi with a population of 252, and the smallest

the Abatubi with only seventeen people. Regardless of the size of the population, the caciques retained their status within the mission community, which included exemption from the obligation of having to pay tribute. The epidemics claimed the lives of caciques, and there were five caciques who were under the age of ten at the time of the census who most likely replaced their fathers who succumbed to the contagion.

The population of Los Santos Mártires mission experienced a net decline of 1,097 between 1731 and 1739, but then recovered through the 1740s and early 1750s. Crude birth rates exceed death rates, and the number of Guarani living on the mission increased from 2,777 in 1739 to 3,176 in 1751 and 2,981 in 1753. In 1756, the death rate reached 101.7, and was the highest recorded in all of the missions. In 1759, and again in the years 1762 and 1763, death rates were slightly higher than birth rates, and the population fluctuated. It was 3,328 in 1760 and 3,099 in 1763. As noted in the previous chapter, smallpox spread through the missions in 1764 and 1765, and claimed the lives of hundreds of Guarani at Los Santos Mártires. At the time of the epidemic 381 refugees from the eastern missions still lived there. In 1764, the contagion claimed the lives of 808 Guarani native to Los Santos Mártires, and another 149 fugitives from Santo Ángel Custodio. Another 421 natives of the mission died from smallpox in 1765. The number of refugees from Santo Ángel Custodio still numbered 330 in 1765, but the report on smallpox mortality in 1765 did not specify how many of the refugees died at Los Santos Mártires. Altogether, smallpox claimed the lives of 560 refugees living on different missions. At the end of 1765, there were only 1,688 Guarani native to the

mission still living at Los Santos Mártires, and 1,662 two years later in 1767 on the eve of the expulsion of the Jesuits.

Following the expulsion of the Jesuits and their replacement by Dominicans under the control of civil administrators, the population of Los Santos Mártires declined due to epidemics as well as out-migration. Post-expulsion censuses discussed in more detail in the next chapter, report residents of the mission who were absent, and show evidence of epidemic mortality. In 1772, the population of the mission totaled 1,724, up from the number reported in 1767, but then dropped in subsequent years. It was 1,321 in 1785, 892 in 1793, and 605 in 1802.

### ***The Chiquitos Mission Frontier***

The Guarani mission frontier in Paraguay was an open frontier linked to larger commercial networks within the larger Río de la Plata region. Moreover, the Banda Oriental (modern Uruguay) and Río Grande do Sul (Brazil) was a border region contested between Spain and Portugal. Local officials organized many military campaigns that involved thousands of Guarani militiamen from the missions, and also used the missions as bases of operations. The movement of goods, peoples, and armies across the region facilitated the spread of epidemics.

At the same time the Chiquitos mission frontier was not as closely linked to markets nor was not the scene of recurring military campaigns. The Jesuits established the first mission named San Francisco Xavier in the Chiquitos region in 1691, and eventually established a total of ten missions. In the 1690s the Black Robes founded four missions: San Francisco Xavier (1691); San Rafael (1695); San José (1697); and San Juan Bautista (1699). However,

there was some instability in the mission program resulting from shortages of missionaries during the War of Spanish Succession (1701-1713). The Jesuits temporarily abandoned San Juan Bautista in 1709, and re-established the mission with a resident priest in 1716. It is more likely to have existed as a **visita**, a community visited periodically as a priest until an increase in the number of Jesuits allowed for the stationing of a resident priest in 1716. At the same time the Jesuits founded Concepción in 1709.<sup>22</sup> There was a second expansion in the number of missions in the 1720s. In 1721, the Black Robes established San Miguel, and San Ignacio de Zamucos three years later. The latter mission operated until 1744, when the Jesuit leadership decided to abandon it. However, four years later, in 1748, they established a new San Ignacio mission at a different location, closer to the other Chiquitos missions.<sup>23</sup>

The final expansion came between 1754 and 1760, with the addition of three new missions to the Chiquitos chain. The first was Santiago established in 1754 with natives transferred to the new community from San José and San Juan Bautista missions. In the following year the Black Robes founded Santa Ana, and in 1760 Santo Corazon de Jesus. The Jesuits relocated neophytes from San Miguel and San Juan Bautista to form the last named community.<sup>24</sup>

The Chiquitos missions were very different in a number of ways from the Paraguay missions. The Chiquitos missions were active **congregaciones**, with non-Christian recruits resettled on the missions periodically as a result of expeditions sent out by the Jesuits to locate new converts. Table 14 summarizes information on the number of non-Christians resettled on the missions as a result of the **excursions**, as they called the expeditions to locate new converts. Most of the expeditions consisted of neophytes from the missions,

and perhaps a Jesuit priest. The Paraguay missions, on the other hand, particularly in the eighteenth century, were not congregaciones, and only in a few instances did non-Christians relocate to the missions. Moreover, the Jesuits established most new missions after 1650 with Guarani from existing missions, and generally did not establish mission communities with non-Christians. The one notable exception to this general pattern was Jesús de Tavarangue, founded in 1685 with recently congregated non-Christians.<sup>25</sup>

The Chiquitos missions had multi-ethnic populations, whereas the populations of the Paraguay missions were more homogeneous. In 1745, for example, the population of the Chiquitos missions reportedly totaled 14,706. The majority, some 9,625 natives of 65.5 percent of the total, spoke Chiquita, but there were neophytes living on the missions that spoke other languages. There were 1,617 Arawak speakers (11 percent), 649 Chapacura speakers (4.4 percent), 1,341 Otuqui speakers (9.1 percent), 1,160 Zamuca speakers (7.9 percent), and 314 Guarani speakers (2.1 percent).<sup>26</sup> The populations of each individual mission consisted of clans drawn from different native communities, and with the periodic resettlement of new converts the populations became even more ethnically diverse.

Another factor distinguished the Chiquitos missions from the Paraguay missions. Chiquitos was a relatively isolated mission frontier in an area with a relatively sparse Spanish frontier population primarily at Santa Cruz de la Sierra. Communications between the Spanish settlements and the missions had to go overland, whereas the rivers in the Paraguay mission region greatly facilitated communications between the Spanish settlements and the mission communities. The Chiquitos missions truly were on the fringes of the Spanish

empire, and were not a part of extensive trading networks that generally facilitated the spread of epidemics, as were the Paraguay missions. Moreover, the Jesuits attempted to limit contacts with the residents of the closest Spanish community, Santa Cruz de la Sierra, who had exploited native labor until the arrival of the Jesuits and the establishment of missions restricted these activities. As a result of this isolation the Chiquitos mission populations did not experience the severe epidemic mortality as documented for the Paraguay missions. Moreover, because of the distance overland between the missions and Spanish settlements and between the missions themselves, the Jesuits may have been able to practice more effective quarantine measures to prevent the spread of contagion.

Epidemic mortality in the Paraguay missions reached as high as fifty percent or more in some instances. There is no comparable data for the missions in northern Coahuila. The highest documented mortality rates during epidemics in the Chiquitos missions were 118 per thousand population at San Juan Bautista in 1749 or eleven percent of the population, 108 per thousand population at San José in 1744, and 98 per thousand population at Santiago in 1761. The death rate reached 83 and 87 per thousand population in 1764 and 1765 respectively at Santiago in 1764 and 1765, that corresponded with the same years of the smallpox outbreak in the Paraguay missions. The generally lower death rates in the Chiquitos missions makes it more difficult to identify epidemics, and with the exception of several years mortality in the years for which there is documentation did not reach levels used to define a mortality crisis: x3 normal mortality.

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There were periodic epidemics during the entire Jesuit tenure in the region. One of the earliest occurred in the years 1697 and 1698, shortly following the establishment of San Rafael mission. There were other outbreaks in 1702, and in the years 1705 to 1707. One document records a trip that Francisco de Herbas, S.J. made to native villages east of the missions in 1708 and 1709. the Jesuit recorded that the epidemic that had spread through the missions the years before also reached non-Christian native communities.<sup>27</sup> An outbreak in 1722 at San Rafael resulted in recently congregated clans fleeing the mission.<sup>28</sup> Flight from epidemics was a common response, particularly among natives only recently congregated on missions. Smallpox reportedly spread through the region in 1738, and most likely into the following year.<sup>29</sup> Information contained in the existing censuses show that there were epidemics in the following years: 1735, 1739, 1742, 1744, 1746, 1749, 1761, and 1764-1765.

Drought and famine also played an important role in demographic patterns, and contributed to the spread of contagion as people suffering food shortages often moved from community to community in search of food. People on the move often carried microbes in their bodies, and helped spread contagion. There are records of famine conditions in 1704, 1711, and 1762-1763 due to drought. In 1718, too much rain at Concepción mission also damaged crops, resulting in food shortages.<sup>30</sup> The 1762-1763 famine conditions reported in the missions may also have contributed to the spread of contagion in 1764 and 1765.

The populations of the Chiquitos missions were high fertility and high mortality populations although birth rates also tended to be lower than birth

rates in the Paraguay missions. In some years the Jesuits baptized non-Christians relocated to the missions, and in the censuses distinguished between the baptisms of adults and young children. In the 1750s and 1760s, the missionaries stationed at San Juan Bautista reported the baptisms of 94 adults. However, the Black Robes did not distinguish between baptisms of newborn children and young children settled on the missions with their parents. Therefore, the birth rates recorded here for the years in which new neophytes moved to the missions may be inflated. At the same time birth rates were lower in the Chiquitos missions than in the Paraguay missions. One factor contributing to the lower birth rates was a gender imbalance in the populations of most of the Chiquitos missions. At the older establishments, which included San Francisco Xavier, Concepción, San Rafael, San Jose, and San Juan Bautista women and girls constituted less than half of the total populations in most years for which censuses exist. This meant that there was a smaller pool of potential mothers in relation to the size of the total population. Females constituted slightly more than half of the population at the newer missions of San Ignacio, Santa Ana, Santiago, and Santo Corazón (see Table 4).

In most years births and the baptisms of newly congregated non-Christians exceeded deaths and the populations of the Chiquitos missions experienced slow to moderate rates of growth. Epidemics slowed but did not stop growth. The population of San Francisco Xavier mission grew from 1,690 in 1718 to 2,342 in 1739, and 3,302 in 1765. The rate of growth was about one percent per year, based on the years for which data on the numbers of baptisms and burials exist (see Table 5). Similarly, the population of

Concepción mission increased from 1,087 in 1718 to 1,858 in 1739, and 3,287 in 1765.

As noted above, the Jesuits transferred part of the populations of several missions to establish new communities. The number of neophytes living on San Rafael increased from 1,532 in 1717 to 2,904 in 1752. The population of the mission dropped to 1,959 in 1755 with the transfer of neophytes to establish Santa Ana, but then grew again as a result of high birth rates of as much as two to three percent per year. In 1765, the numbers of neophytes totaled 2,733, and 2,746 at the time of the expulsion of the Jesuits. Similarly, the Black Robes moved neophytes from San José in 1755 to establish Santa Ana. The population of the mission was 1,820 in 1713, and grew to 2,904 in 1752. It dropped to 2,024 in 1756, but then increased to 2,242 in 1765. The Jesuits transferred people from San Miguel to establish new missions twice. The first was San Ignacio de Chiquitos in 1748, and again in 1761 to Santo Corazón. In 1735, the population of San Miguel was 2,242, and grew to 3,271 in 1747 and 1,972 in the following year with the relocation of more than a thousand neophytes to San Ignacio. The population of the mission grew, and reached 2,956 in 1760. It then dropped in the following year to 1,219 following the relocation of some 1,600 neophytes to the newly established Santo Corazon mission. The final example is San Juan Bautista that contributed neophytes to newly founded missions. In 1718, San Juan counted 1,820 neophytes, and this number increased to 2,091 in 1747. It dropped to 1,880 in the following year with the transfer of people to newly established San Ignacio. The population of the mission grew slightly to 2,049 in 1764 and 2,006 in 1765, but then dropped to 1,886 in 1765 (see Table 3).

The populations of the later missions established between 1748 and 1761 experienced moderate growth in the years leading up to the expulsion of the Jesuits. The first San Ignacio, established in 1724 for the Zamucos, evidenced a pattern a slow growth from 587 in 1739 to 679 in 1744, when the Jesuits closed the mission down. When re-established in 1748, San Ignacio mission counted 1,694 neophytes, and this number increased to 2,645 in 1765 and 3,134 in 1767. The population of Santa Ana grew from 1,295 in 1755 to 1,771 in 1765 and 1,787 in 1767. The number of neophytes living on Santiago numbered 882 when founded in 1755, 1,556 in 1765, and 1,614 in 1767. The population of Santo Corazón mission was 1,697 in 1761, increased to 2,440 in 1765, but then declined to 2,287 in 1767 (see Table 3).

### ***Conclusions***

The Spanish government made use of missions as a frontier institution throughout its territories in the Americas, for native peoples who were both nomadic hunters and gatherers and sedentary agriculturalists. There are many common threads in patterns of development on mission frontiers in northern Mexico, the tropical lowland frontiers of South America, and elsewhere. One significant difference was the survival and extinction of natives who were sedentary agriculturalists when drawn into the missions, or nomadic hunters and gatherers.

The numbers of neophytes on missions populated by hunters and gatherers was small, and these populations proved to be inviable.<sup>31</sup> High mortality among adults and particularly women of child bearing age greatly reduced the ability of the populations to reproduce, and within several generations of entering the missions the bands disappeared. The Franciscans

failed to create viable native communities on San Juan Bautista and San Bernardo, and the town in the area developed from San Juan Bautista presidio, and not the two missions. Similarly, the California missions, including the two examined here, San Carlos and Santa Cruz, did not develop into stable communities, and only small numbers of natives survived at the time of the closing of the missions in the 1830s. Few of the surviving natives continued to live in the neighborhood of the ex-missions, and within several decades of the closing of the missions the native peoples were culturally extinct and were on the way to biological extinction as well.

In contrast, the sedentary native populations of the missions in Paraguay and the Chiquitos region were viable, and communities continued to exist following the expulsion of the Jesuits in 1768 from Spanish America. Guarani continue to live around the former Paraguay missions, and the sites of the former Chiquitos missions are still towns populated, in part, by the descendants of the native peoples who first built the missions.

One final observation: a comparative approach as offered in this paper highlights how the local is a part of a much larger history. The presidio-mission complex at San Juan Bautista or the other missions and presidios on the Texas frontier formed part of a much larger colonial empire with a common agenda for the frontier. This was to convert and transform the native peoples into autonomous communities that would constitute a part of the Spanish political scheme of indirect rule. The model for this frontier policy was the native communities in central Mexico. However, as this paper has shown, variations in the level of social and political organization of the native people brought to live on the missions determined ethnic survival or extinction.

Table 1: Population of San Juan Bautista and San Bernardo Missions in Selected Years

Year	San Juan Bautista	San Bernardo	Year	San Juan Bautista	San Bernardo
1699	150		1761	222	370
1702		400	1762	216	377
1705	144		1764	169	325
1706	153	115	1772	216	
1727	240	200	1777	107	165
1738	298	563	1781		155
1740	436	460	1790	63	103
1756	224	297	1798	44	74

Source: Robert H. Jackson, "Congregation and Depopulation: Demographic Patterns in the Texas Missions," *Journal of South Texas* 17:2 (Fall, 2004),35; Cecilia Sheridan, *Anonimos y desterrados: La hacienda por el "sitio que llaman de Quauyula" siglos XVI-XVIII* (Mexico, D.F., 2000), 291.

Table 2: The Vital Rates of Los Santos Mártires Mission in Selected Years

Year	Population	Families	Baptisms	Burials	CBR	CDR	A.F.S.
1702	3536	897	289	259	82.4*	73.9*	3.9
1724	3343	795	190	155	57.4*	46.9*	4.2
1733	3665	901	202	491	51.1*	124.2*	4.1
1736	3396	861	188	199	55.0*	58.3*	3.9
1739	2777	723	132	545	40.9	184.2	3.8
1740	2829	682	170	95	61.2	34.2	4.2
1741	2833	701	192	160	67.9	56.6	4.0
1744	2834	699	184	201	64.5*	70.5*	4.1
1745	2847	710	170	141	60.0	49.8	4.0
1746	2930	723	220	134	77.3	47.4	4.1
1747	2974	734	214	143	73.0	34.1	4.1
1753	3235	812	188	144	58.9*	45.1*	4.0
1756	3217	737	205	341	61.1*	101.7*	4.4
1759	3218	763	187	198	57.9*	61.3*	4.2
1762	3225	760	169	182	51.8	55.9	4.2
1763	3099	729	167	185	51.8	59.2	4.3
1764	2220	324	173	1129	54.1	364.3	6.9
1765	1688	365	83	561	37.4	25.2	4.6
1767	1662	430	115	128	67.6*	75.3*	3.9
1802	609		13	38	20.5*	59.9*	

\* Estimated.

Source: Ernesto Maeder, "La poblacion de las misiones de Guaranies (1641-1682). Reubicacion de los pueblos y consecuencias demograficas," *Estudios Ibero-Americanos* 15:1 (June 1989), 49-80. ; Ernesto Maeder, "Fuentes Jesuicas de informacion demografica misional para los siglos XVII y XVIII," in Dora Celton, coordinator, *Fuentes utiles para los estudios de la poblacion Americana: Simposio del 49° Congreso Internacional de Americanistas, Quito 1997* (Quito, 1997), 45-57; Guillermo Furlong Cardiff, S.J., *Misiones y sus pueblos de Guaranies* (Buenos Aires, 1962), 175-179, 674; Thomas Whigham, "Paraguay's Pueblos de Indios: Echoes of a Missionary Past," in Erick Langer and Robert H. Jackson, eds., *The New Latin American Mission History* (Lincoln, 1995), 168; ; Pablo Hernandez, S.J., *Organizacion social de las Doctrinas Guaranies de la Compania de Jesus*, 2 vols. (Barcelona, 1913), vol 2, 616-617; Julio Quevedo, *Guerreiros jesuitas na utopia de Prata* (Sao Paulo, 2000), 96; Individual annual censuses of the Jesuit missions for 1711, 1714, 1724, 1731, 1733, 1735, 1736, 1738, 1739, 1740, 1741, 1744, and 1745, 1746, 1747, 1757, 1760, 1762, 1763, 1764, 1765, and 1767 titled "Catologo de la numeracion annual de las Doctrinas del Rio Paraná Año; Catologo de la numeracion annual de las Doctrinas del Rio Uruguay; AGN, Sala IX 7-2-1, 6-9-6, 6-9-7, 6-10-6; "Empadronamiento de las Treinta Pueblos de Misiones, por el Coronel Don Marcos de Larrazabal," 1772, AGN, Sala 9-18-8-4; Individual Missions Census for 1801 found in AGN, Sala 9-17-3-6; for 1702 Catologo de la Numeracion de las Doctrinas del Rio Paraná, Catologo de la Numeracion de las Doctrinas del Rio Uruguay, Manuel Gondra Collection, MG 592, Benson Latin American Collection, General Libraries of the University of Texas at Austin; Edgar and Alfredo Poenitz, *Misiones, Provincia Guaranitica: Defensa y Disolucion* Posadas, 1993), 54-55; Pedro Vives Azancot, "Entre el esplendor y la decadencia: La poblacion de misiones (1750-1759)," *Revista de Indias* 42: 169-170 (Julio-Diciembre, 1982), 541-544; Ernesto Maeder and Ramon Gutierrez, *Atlas historico y urbano de la region del noreste argentino: Pueblos de indios y misiones jesuicas (siglos XVI-XX)* (Resistencia, 1994).

Table 3: Population of the Chiquitos Missions, in Selected Years

Year	San Javier	Conc.	San Rafael	San Jose	San Miguel	San Juan	San Ignacio	Santa Ana	Sant.	S. Corazon
1713	1796			1820						
1714		1213								
1717	1680	1226	1532	1935						
1718	1690	1087	2615	1380		1820	900			
1723			1138							
1734		1672		1832		1992				
1735	2345			1911	2242	1615				
1736		1721								
1738			2085		2208	1793				
1739	2342	1858	2085	2011	2208	1793	587			
1740	2481									
1742	2413	1868	2144	2409	2580	1927	648			
1743	2416	1912	2196	2439	2633	1970	666			
1744	2403	1950	2256	2218	2935	1855	679			
1745	2293	2055	2323	2477	2955	1981				
1746	2314	2131	2411	2916	3130	2097				
1747	2435	2212	2497	2879	3271	2091				
1748	2497	2260	2543	2803	1972	1880	1694			
1749	2480	2556	2613	2783	1995	1737	1624			
1750	2550	2592	2749	2831	2024	1726	1882			
1752	2323	2574	2944	2904	2195	1850	1766			
1755	2578	2597	1959	2571	2500	1855	1990	1295	882	
1756	2639	2703	2038	2024	2619	1811	2106	1334	1460	
1757	2728	2778	2102	2074	2689	1918	2196	1359	1390	
1758	2799	2865	2173	2139	2822	1922	2144	1412	1440	
1760	2978	2978	2311	2208	2956	2049	2339	1482	1718	
1761	3065	3039	2374	2186	1219	2006	2382	1511	1387	1697
1764	3256	3182	2632	2211	1335	1814	2560	1693	1525	2392
1765	3302	3287	2733	2242	1429	1883	2645	1771	1556	2440
1766							2734			
1767	3201	3278	2746	2715	1473	1953	3134	1787	1614	2287
1768	2019	2927	2046	2068	1453	1799	2133	1771	1594	2279
1775		2255								
1778/1780	1491	2020	2735	2700	1889	1390	2120	1693	1484	1026
1784		2255				1275		1604	1257	1132
1791	1586	1950	2771	2738	1905	1121	1331	1313	1359	1218
1794						1272				
1795								3220		
1796						1184				
1798						1097				
1799		2222						1883	1379	
1800	1578	2256	2869	3519	2220	1454	3065	1911	1016	1216
1801									1379	
1802			2831						1418	
1804	1517			3473	2506	1592				1363
1805	1578	2366	2729	3454	2468	1584	3437	1648	1424	1263
1806	1625	1797		3651	2661	1565	3976	1800	1447	1333
1807		1816	2968	3660	2753	1433	3929	1795		1376
1819	2136	2751	1692	2451	3209	1999	4106	1790	714	779

1823	1576	3080	944	1855	3209	679		1385	1006	643
1825	2005	3004	900	3004	2697	707	3299	927	1111	789
1830	946	2250	1050	1910	2150	879	2934	798	1234	806
1833	1300	2200	1000	2200	2700	1000	3500	1000	1300	800
1845	1500	2000			3200	1097		2000		
1847							2496	1667		

Source: Censuses of the Chiquitos Missions found in Archivo General de la Nacion, Buenos Aires, Biblioteca Nacional, 6127/14 and 6467/101; Pedro Querejazu, ed., *Las misiones jesuíticas de Chiquitos* (La Paz, 1995), 290-295, 336; Source: Ernesto Maeder, "Las misiones de Chiquitos: Su evolucion demografica la etapa jesuitica y pos-jesuíticas (1710-1767 y 1768-1830)," in Marcelo Arduz Ruiz and Enrique Normando Cruz, eds., *Iglesia, misiones y religiosidad colonial* (Jujuy, 2000), 11-36.

Table 4: Females as a Percentage of Total Population in the Chiquitos Missions, in Selected Years

Year	San Javier	Conc.	San Rafael	San José	San Miguel	San Juan	San Ignacio	Santa Ana	Sant.	S. Corazón
1734						50.3				
1735				50.1	49.8	42.6				
1736		48.2								
1738						48.4				
1739	50.0	49.1	46.6	51.8	50.1	48.4	47.7			
1742	50.1	47.9	47.7	51.9	50.4	50.6	52.2			
1743	49.9	46.8	48.6	45.5	50.2	50.5	52.0			
1744	50.1	47.1	47.0	52.6	49.9	50.3	51.8			
1745	46.5	47.1	46.7	50.8	48.7	49.2				
1746	45.6	47.3	47.4	51.2	49.1	47.6				
1747	48.4	47.7	47.7	51.4	49.3	48.3				
1748	48.8	48.1	49.1	52.1	50.6	46.7	48.7			
1749	48.8	48.6	48.8	52.0	51.0	47.3	50.1			
1750	48.6	48.8	49.2	51.8	50.0	48.2	50.0			
1755	48.0	48.2	47.3	49.0	50.9	49.8	51.3	51.9	51.4	
1756	48.1	48.0	48.1	47.8	50.9	49.7	51.3	53.4	51.0	
1757	47.9	47.8	48.2	47.8	51.1	51.9	51.4	53.1	51.1	
1758	48.2	48.1	48.7	47.9	52.3	52.0	50.9	57.4	51.2	
1760	47.8	47.2	48.3	49.6	51.3	49.6	51.5	51.5	50.5	
1761	48.2	46.4	48.9	49.5	50.0	48.9	50.1	51.6	51.0	51.4
1764	48.3	46.9	48.9	48.6	49.7	49.6	51.3	51.6	52.1	51.8
1765	48.4	47.2	48.9	50.8	50.7	49.3	51.4	51.8	51.9	52.0
1767	48.7	47.2	49.8	48.4	47.6	49.1	58.6	52.1	51.9	51.9
1768	48.5	49.0	48.8	48.4	52.9	52.3	48.1	50.7	53.0	51.3

Source: Sources listed in Table 3..

Table 5: Vital Rates of San Francisco Xavier Mission

Year	Families	Pop	Baptisms		Burials	CBR	CDR	AFS
			Parvulos	Adults				
1735	605	2345	109		94	46.8*	40.3*	3.9
1738			114	49				
1739	560	2364	112		191	45.4*	78.2*	4.2
1740		2481	120	2				
1741			130					
1742	558	2378	134	3	100	57.2*	42.7*	4.3
1743	546	2416	131		138	55.1	58.0	4.4
1744	556	2403	127		140	52.6	58.0	4.3
1745	552	2293	115		138	47.9	57.4	4.2
1746	582	2314	125		71	54.5	31.0	4.0
1747	612	2435	115		144	49.7	62.2	4.0
1748	620	2497	153		91	62.8	37.4	4.0
1749	622	2480	115		130	46.1	52.1	4.0
1750	633	2550	156		86	62.9	34.7	4.0
1751			72			28.2		
1752		2323	72					
1753			216					
1754			156					
1755	606	2578	158		92	62.9*	36.6*	4.3
1756	615	2639	165		104	64.0	40.3	4.3
1757	631	2728	156		57	59.1	21.6	4.3
1758	642	2799	154		83	56.5	30.4	4.4
1759			170					
1760	656	2978	171		101	58.8*	34.7*	4.5
1761	666	3065	191		104	64.1	34.9	4.6
1762			158			51.6		
1763			194					
1764	703	3256	176		113	55.1*	35.4*	4.6
1765	728	3302	198		142	60.8	43.6	4.5
1766			164			49.7		
1767		3201	173	2				
1768			147			45.9		

\*Estimated.

Source: San Francisco Xavier Baptismal Register, San Javier Parish Archive, San Javier, Bolivia; Censuses of the Chiquitos Missions found in Archivo General de la Nacion, Buenos Aires, Biblioteca Nacional, 6127/14 and 6467/101; Pedro Querejazu, ed., *Las misiones jesuíticas de Chiquitos* (La Paz, 1995), 290-295, 336; Source: Ernesto Maeder, "Las misiones de Chiquitos: Su evolucion demografica la etapa jesuitica y pos-jesuíticas (1710-1767 y 1768-1830)," in Marcelo Arduz Ruiz and Enrique Normando Cruz, eds., *Iglesia, misiones y religiosidad colonial* (Jujuy, 2000), 11-36.

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**Notes**

- <sup>1</sup> Maria Wade, *The Native Americans of the Texas Edwards Plateau 1582-1799* (Austin, 2003), 1-9, 60-67. For the context of settlement in Nueva Vizcaya and Spanish-native relations see Deeds, Susan, *Defiance and Deference in Mexico's Colonial North: Indians Under Spanish Rule in Nueva Vizcaya*. (Austin, 2003).
- <sup>2</sup> Wade, *Native Americans*, 177-178.
- <sup>4</sup> Felix Almaraz, *Crossroads of Empire: The Church and State on the Río Grande Frontier of Coahuila and Texas, 1700-1821* (San Antonio: Center for Archaeological Research, University of Texas at San Antonio, 1979), 51-53.
- <sup>5</sup> Robert Weddle, *San Juan Bautista: Gateway to Spanish Texas* (Austin: University of Texas Press, 1968), 271; Robert H. Jackson, "Congregation and Depopulation: Demographic Patterns in the Texas Missions," *Journal of South Texas* 17:2 (Fall, 2004), 6-38.
- <sup>6</sup> T.N. Campbell, *Ethnohistoric Notes on Indian Groups Associated with three Spanish Missions at Guerrero, Coahuila* (San Antonio: Center for Archaeological Research, University of Texas at San Antonio, 1979).
- <sup>7</sup> *Ibid.*, 55-59. Wade, *Native Americans*, summarized reports made by Franciscan missionaries of visits to northern Coahuila and Texas that recorded many of the same names as appear in the mission records.
- <sup>8</sup> *Ibid.*, 55-59.
- <sup>9</sup> Almaraz, *Crossroads of Empire*, 51-53.
- <sup>10</sup> *Ibid.*, 51-52.
- <sup>11</sup> *Ibid.*, 48.
- <sup>12</sup> San Carlos Mission Baptismal and Burial Registers, Monterey Diocese Chancery Archive, Monterey, California. Annual reports that summarized vital rates on the California missions are preserved in the Archivo General de la Nacion, Mexico, D.F., "Documentos para la Historia de Mexico," and the Santa Barbara Mission Archive-Library, Santa Barbara, California. Figures on the population, baptisms, and burials recorded at San Carlos mission are found in Robert H. Jackson, *Indian Population Decline: The Missions of Northwestern New Spain, 1687-1840* (Albuquerque, 1994), appendixes 4 and 5.
- <sup>13</sup> *Ibid.*, appendix 5.
- <sup>14</sup> Santa Cruz Mission Baptismal Registers, Monterey Diocese Chancery Archive, Monterey, California.
- <sup>15</sup> Jackson, *Indian Population Decline*, 173-174.
- <sup>16</sup> *Ibid.*, appendix 4.
- <sup>17</sup> Robert H. Jackson, *Missions and Frontiers of Spanish America: A Comparative Study of the Impact of Environmental, Economic, Political, and Socio-Cultural*

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**Variations on the Missions in the Rio de la Plata Region and on the Northern Frontier of New Spain** (Scottsdale: Pentacle Press, 2005), appendix 1.

<sup>18</sup> Jackson, *Indian Population Decline*, 112-113.

<sup>19</sup> In a report prepared in March of 1706, Salvador de Rojas noted the Martires had been relocated, and a temporary church had been built and dedicated: Salvador de Rojas, San Luis, March 7, 1706, Angelis Collection, Rio de Janeiro, Brazil, 29-7-79, # 93.

<sup>20</sup> A team of scholars affiliated with the Universidad Nacional de Misiones has conducted archaeological, architectural, and historical research on Los Santos Mártires mission. See, for example, Ruth Poujade, et al, "Reucperacion de Santos Martires del Japon, 2001-2002." This report is available on the internet at: <http://enciclopediademisiones.com>. Arq. Graciela de Kuna developed a diagram of the mission complex that identified the bodies of water near the housing of the Guarani.

<sup>21</sup> Jackson, *Missions and Frontiers of Spanish America*, appendix 2.

<sup>22</sup> Roberto Tomicha Charupa, *La primera evangelización en las reducciones de Chiquitos, Bolivia (1691-1767)* (Cochabamba, 2002), 517.

<sup>23</sup> Ibid, 536-537, 547, 549.

<sup>24</sup> Ibid, 557-559.

<sup>25</sup> "Anua de las reducciones del Paraná, 1699," Angelis Collection #925, 29-7-70. The report noted of Jesus that: "Esta Reducción, toda es de gente nueva recién sacada de los montes, y como ahora no se les puede obligar tanto al trabajo la Iglesia y las casas están pobres, porque son de paja como también al principio lo fueron las demás Reducciones..."

<sup>26</sup> Tomicha Charupa, *Primera evangelizacion*, 278.

<sup>27</sup> Ibid, 368-369.

<sup>28</sup> Ibid, 369.

<sup>29</sup> Ibid, 369.

<sup>30</sup> Ibid, 372-373.

<sup>31</sup> For a recent discussion of demographic patterns on the missions of Texas, populated primarily by hunters and gatherers, see Robert H. Jackson, "Congregation and Depopulation: Demographic Patterns in the Texas Missions," *Journal of South Texas* 17:2 (Fall, 2004), 6-38.