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role of the anthropologist. These men and their families are marginalized and have a long and interesting history to study and describe. Their future is unsure and, as fishers, may not exist for long. The cooperation of this study with an ecological one may be the most revealing practice to use. Something like that could reveal important data for the efforts to build and utilize fisheries if occupational fishing remains unprofitable.

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post-colonial problems, issues of modernity and global economies, and the violated rights of indigenous people. Those responsible should no doubt play a role in the resolution. Many Catarinecos could be said to have a crisis of identity in the rapid transformation of their town and the traditional economy. The US Fish and Wildlife and the Guatemalan government should go hand in hand in an effort to develop some sustainable fish economy, however large that is suited to the present ecology.

The decline in the number of fishers and the changing of Catarineco tradition and identity is not simply the result of an ecological mistake that destroyed their resource. The systematic force pushing them into tourism, the labor laws, in combination with the ecological circumstances is the more holistic explanation of why it has happened. The fishers of Santa Catarina are an example of the effects of many forces and phenomena of interest to anthropologists. It is an interesting ethnohistory as well and can challenge our current methods of investigation. Here I have tried to place the declining number of fishers in a complex context that is both historical and ecological in content. It is not however the complete description.

SUGGESTED FURTHER STUDY

The necessity of a full ecological study of Lake Atitlán and the entire drainage basin needs to be emphasized. Restrictions on foreign introductions are not being enforced and many are done without quality research prior. With a full ecological study, as well as incorporating the results into the readily available literature could get many parties on the same page, especially those that wish to help the lake. Government agencies to the common fisher would be grateful for an accurate study of the lake.

A more in-depth study of the life ways of the fishers, in Santa Catarina and elsewhere, is still important to me. I believe that the preservation of culture in writing is very important for the

had likely enjoyed for some time, we must take his study into account as it is one of the few we have. With colonial power and modernity's intense movement, many communities began to adjust. When intense agriculture was becoming the main economic trade on the northern shore, Catarinecos did not have the land available to participate. Many continued their lake trades, but as we can see, many became dependent on the wage labor being offered and demanded of them. Tourism was an alternative to both of these types of work and has grown tremendously for the small community.

The experience of the Catarineco fisher is not unique apart from the general experience of many Mayans in Guatemala. The racial discrimination and disregard for human rights is a constant problem for the young country. It is important though that we have specific examples of how that disregard and other forces affect the lives of people. The fishers of Santa Catarina are possibly an antiquity and those that remain may simply be traditionalists who refuse or are unable to adapt modernity. The past though has shown that Mayan have been routinely used as an expendable labor pool whose traditions were not brought into the mainstream economy. Rather the faces of the indigenous people have been used as tourist attractions and put up as a façade of national identity.

Future policy and studies need to take into account this complex context. More restriction should be placed upon the foreign introduction of species into the area. The haphazard manner in which this has been done in the past and continues today is a degradation of a beautiful lake and intricate cultural resource for the native people that live there. A complex ecological and social study needs to complement any future policy making as well. Tourism is entrenched and needs to be taken into account. The larger discussion here is the concern for the well-being of those people that have been systematically discriminated against, and in this case, takes into account

night ahead. I sat and watched like I had done many times before. ~ *July 3, 2006,*

Santa Catarina Palopó

Reflection is an odd frame of mind. From the comfort of home, a small ranch in southeast Idaho, it is my greatest chore. I read the literature over again and reflect upon my own notes and journal entries. It is no wonder that the ethnographic process is in need of demystifying as the ethnographers themselves can be overwhelmed with it. At least I know of one ethnographer who struggles with it. Ethnographic mystery is a genre of thought as much as of writing. Sitting here, watching the horses play in the cool morning, their legs wet with dew, I am reliving the detective work I conducted on the shores of Lake Atitlán.

The introduction of the black bass was a significant ecological event. I imagine that those responsible had a positive economic effect in mind before they envisioned the ecological train wreck that many believe happened. Regardless of the intent or outcome, I do not think that the dwindling numbers of occupational fishers can be explained by it, especially the changes in Santa Catarina. There is no doubt that many fishers and crabbers were affected by the black bass and it may have been a prime mover, but in historical context, the numbers of fishers has been declining long before the introduction. Rather it seems that Catarinecos have adjusted often to the ever changing social and economic climate as well as the ecological.

Santa Catarina has had a prime piece of shoreline from which to gather fish, crabs and reeds. In the past we can see that they were especially well known for their crabbing, matting, and weaving as well as fishing. The same could be said for other towns along the southern shore. Despite this, we also can see that Lake Atitlán is a young lake with very little shoreline, two characteristics that make it difficult for any ecology to thrive. Meek suggested that commercial would never be all that successful, though I doubt he was aware of the success that the Mayas

sustained the same number of fishers as it did in the past. The number of foreign introductions into the lake can only be guessed at. There are numerous reports of people introducing any foreign species that seemed to fit. These introductions are done unprofessionally and do more harm than good. Even those done by professionals, such as the US Fish and Wildlife study in 1950, are ethnocentric in their emphasis on large fish and a tourism geared management of the lake. It seems that the 1950 study did initiate the introduction of the black bass in 1953. Whether or not it was bias to aid Pan American Tours is hard to tell from the literature, but their emphasis is on a tourist economy at the expense of traditional methods and fish encourage tourism in general.

DISCUSSION

~ My toes, brown from the sun and dirt, shown well against the blue waters. I stared a bit down into the lake, my mind wondering its ripples. My hands gripped the dock, resting my body. The fashion in which the world did not seem to make sense was becoming a comfort and the anxiety was giving way to choosing to be content. So many questions must be left unanswered and somewhere in process I had grown to realize my place within the experience was always to remain smaller than those question marks. What could I say about my short time here in Guatemala? What could I say about these men whom I was so curious about? How was I to analyze my seemingly meager pile of data and come to some coherent examination and explanation? Intimidated, exhausted and anxious, I sat and watched Lake Atitlán move under the evening breeze, crab fishers came in, some handed their loads to their sons. Fishers prepared their boats for the long

“There is no foreseeable reason why a fish supply adequate for local food requirements cannot be produced in the lake. Moreover/ it is important that sport fishing be developed in as an additional attraction.” (1950:109)

Holloway suggests a number of regulations as well: 1) There should not be closed seasons; 2) Nets, traps (the traditional Atarraya traps included) should not be permitted in Lake Atitlan during holidays or Sundays as they may upset the sports fishermen and they should not be allowed during the bass spawning season for the same reason; 3) Nasas (basket traps) should not be permitted for similar reasons; 4) Nets of any kind should not be permitted as they may interfere with the recreational use of the fish; and 5) harpoons and night fishing should be allowed. (1950:25-6)

Carlsen notes that “not only did the sport fishing industry fail to develop, but the ancient industry of trapping pescaditos became obsolete” (1997). The ancient industry is described by Meek to include: stone traps along the shore into which the fish are run and captured, small mesh throw nets, hand lines, conical traps made of wickerwork, and long rectangular nets into which the fish are rushed and captured (Meek 1908). Since the elimination of the native fishery in Lake Atitlán, Guatemala, the introduced largemouth bass are most effectively caught using SCUBA gear or from motor boats. Since these techniques are beyond the monetary means of the average native fisherman, fishing does not provide supplementary income in this community (Paine and Zaret 1973).

The ecological context reveals many reasons for the decline in the number of fishers on Lake Atitlán. In the first case the lake is not suitable for any large population of fish because of its lack of shore area and it being a cold lake. The population boom of the latter half of 20th Century would have strained any aquatic food resource. That is not to say that it could not have

I was able to recover the study upon the chance correlation of an old library number. *The Recommendations for the Development of the Fishery Resources of Guatemala* was written by Ancil D. Holloway as a part of *A Fish and Wildlife Survey of Guatemala* by George B. Saunders, Charles O. Handley, Jr., and Holloway.

“Undoubtedly the section of the present report of the most immediate interest to Guatemala is that prepared by Mr. Holloway describing the lake and stream survey, together with its findings and recommendations.” (1950:2)

Holloway emphasizes that one of the purposes of his study is to determine the sustainability of fishery development throughout the lake (1950:99). Among the other purposes he also notes that the goal of the future management of the lake is to yield the maximum number of desirable fish, planting the appropriate types of fish, and establishing the proper methods and fishing regulations to maintain to balance between certain species of fish, i.e. desirable vs. non-useful, predator vs. prey (1950:99). This endeavor is stated to be based upon the management experience in the US.

Because of the landlocked nature of Lake Atitlán, it was suggested to the Guatemalan government to give the suggestions made by the report a trial run there. Holloway suggests the introduction of the smallmouth bass and the black crappies because of their large size and ability to be caught easily and inexpensively (1950:100). Holloway cites Meek’s 1908 study in his discussion about the numerous foreign introductions into the lake (1950:109). The study also emphasizes the tourist economy and the potential for sport fishing for a bass as a recommendation.

effects on the native species of fish, has been equally damaging for the native freshwater crab and the bird population.” (Carlsen 1997)

“When introduced into Cuba, our largemouth bass (*Micropterus salmoides*) preyed too heavily on the native cyprinodont fishes that are important in malaria control. In Guatemala, the largemouth wrecked the freshwater crab fishery in Lake Atitlán and then proceeded to prey on the young of the rare and flightless, giant pied-billed grebe (*Podilymbus gigas*).” (Lennon 1970)

The black bass had a large effect on the fish population of the lake. When I asked around to find out who was involved with the introduction though, many people hesitated and then put forward an educated guess. One man said that it was “Teddy Roosevelt himself” on one of his famous expeditions. Experts are sure that the US Fish and Wildlife put forward much of the effort. Many said that the Guatemalan government funded a study that resulted in their introduction. As noted above, another party was a tour company named Pan American. Others said that it was a wealthy foreigner living on the lake. In most of these cases, it would appear that the black bass introduction was an effort to aid the seemingly marginal ecology and/or encourage tourism.

The US Fish and Wildlife Service, of the US Department of the Interior, did conduct a study of the ecology of the lake March through May of 1946 and 1947. Despite being the most recent in-depth ecological study, people often question whether it happened at all and who conducted it. Since the introduction of the black bass is almost unanimously regarded as an ecological blunder, the paper is sometimes thought to be restricted and hidden by the US government to save face. It became a priority to find this document when I returned to the US.

candidates. The first three listed were suggested as a second tier option as well as bluegill, while the last three were described as the premium type introduction. Another note is that a herbivore fish, like the carp, should never be introduced to the lake as it has dwindling vegetation, he is very stern about this. Despite his emphasizing the numerous options and optimism, Meek concludes the section: “No species of fishes will ever become abundant in this body of water, because the spawning and feeding grounds are so small, when compared with the immense volume of water in the lake” (1908). It should be noted that the Guatemalan government introduced the black crappie and the blue gill soon after this (Carlsen 2004).

The introduction of the black bass in 1958 is an event both in the literature and in the people’s interpretation of the changes that have taken place around the lake. In the literature, this event is often cited as the sole cause for much of the ecological damage or change that has happened.

“The people of Santa Catarina used to live almost entirely by fishing and trapping crabs, but these days the black bass have put an end to all that and they’ve turned to farming and migratory work, with many of the women traveling to Panajachel and Antigua to peddle their weaving.” (Stewart 2006)

“Then, in 1958, due largely to the efforts of the now defunct Pan American Airlines, largemouth bass were introduced into the lake to promote sport fishing and as Douglas Madigan (1976:96) notes, “an entirely new ecological balance was created.” He writes that the largemouth bass, which he describes as an “ecological dysfunction,” quickly “vacuumed” the lake of its native forage fishes . . . It should be noted that the introduction of the bass, besides its devastating

focal point for the study. One important fact from this document is the introduction of the mojarra fish into the lake in 1575 (Betanor 1585). The mojarra is often thought by both indigenous and ladino populations to be native to the lake. The mojarra is small and thrives alongside many of the others. This is no surprise as it was most likely harvested from nearby water sources, in a similar climate, for its introduction. Another important part of this survey was the documentation of what lake resources the indigenous peoples valued. They were asked to rate, in order of importance, the lake resources they valued. The results were: 1st the reeds, 2nd the crabs, 3rd the fish, 4th the snails.

In the early 1900's, American ecologist, Seth Eugene Meek, conducted a number of studies in Central and South America. His brief visit to the highlands is punctuated with a work that describes the zoology and ecology of Lake Amatitlan and Atitlán published in 1908. The professionally done ecological study itself is important as it is one of few done in the 20th Century. He notes three smaller fish species that thrive in the lake and that "these fishes are used for food by the natives, especially by those living in Santa Catarina" (Meek 1908). Of these three he states the Serica (*Cichlasma nigrofasciatum*) as the largest, the Pescadito (*Pacilia spinenops*) as the most abundant and the Gulumina (*Fundulus guatemalensis*) as the least important. He also mentions that two or three species of Mojarra being previously introduced.

Meek states that a sustainable commercial fish population will never thrive here due to the small amount of shallows that is necessary for spawning and feeding. Its volume and depth will also make the capture of fishes as too difficult to be profitable. The beauty of the lake, as well as the lack of fisheries, and economic potential for tourism is obvious to Meek and he mentions that a game fish might be a viable and profitable introduction. He suggests: black bass, rock bass, black crappie, steel head salmon, land lock salmon and rainbow trout as possible

Locals in Santa Catarina tended to always orient their bodies toward the lake when asked to draw a cognitive map of the town. While nearly all had the Catholic church at the center of the map, the lake was the far largest and most definite landmark seen on every map. Often, they included fish and crabs as well as the volcanoes with their lakes. One small girl even drew the small pueblo as an island completely surrounded by the lake with volcanoes all along the opposite shoreline. It is no doubt that the lake is an immense sight and object within people's worldview.

The lake was formed more than forty thousand years ago. The caldera was formed some time before that, after the collapse of one or several volcanoes following a period of frequent activity. The lake covers ninety-two square miles and has a depth of over one thousand feet. The sides of the lake sink quickly to this incredible depth so there is a very limited shoreline area. The important pieces of shoreline are near the few inlets. The depth of the lake has had the tendency to be irregular since researchers have been visiting the area. A common theory is that the lake has a fifty year cycle where the water level will drop and rise about every fifty years. This theory is not unanimously accepted by the experts, though a number of anthropologists have included it in their descriptions. The alternative explanation is that the lake's depth, being landlocked and dependent on the underwater drainage, varies with the geologic activity beneath it. The waterlines seemed to have been fairly regular for long periods in the past and the lack of scientific explanation for the other theory. In either case, the fact that the lake is landlocked and depends on the underground drainage is a fascinating circumstance.

In 1585, the Spanish crown published a document named *Relacion de Santiago, Atitlán*. It described and analyzed the results of a fifty question survey that was conducted among the indigenous people of the western highlands in Guatemala. Santiago, a thriving city today, was a

about 7-9PM, depending on the previous day's weather. They let it stand for five hours. They return and gather in the catch, resetting the net in the same or another location. After the second catch they return to their hometown and immediately sell their catch at about 6 or 7AM.

In summary, from the historical vantage the Catarineco fisher is among the social and racial class of people in Guatemala that has been subjected to apartheid type rule for the last few centuries. They have been moved to new locations and forced into new religions, but most relevant of all in this case, they have been economically forced out of many of their traditional occupations such as fishing, crabbing, and reed gathering. The earlier anti-vagrancy laws, debt peonage, and other labor laws reflect the Ladino government's view of Maya tradition and well-being as unimportant. These systems are entrenched in the worldview of both indigenous and non-indigenous people as simply the state of things. The necessity of a labor pool began the divergence of native people away from their traditional occupations. Desperate for land ownership and a place in the new economy, many Mayans desired to participate in new professions, often this has been through tourism.

ECOLOGICAL CONTEXT

The relationship between humans and their environment is an important one to describe and take into account when understanding Catarineco worldviews. In studying the fishers of Lake Atitlán I could not ignore the significant ecological events that have affected their lives. Some of the most mentioned changes were orientated towards changes in the natural environment. The following section presents some of the ecological events affecting Santa Catarina. An interview with a local ecologist and expert revealed much of the background necessary for this discussion. Surveys and cognitive maps were also used in the analysis of the ecological context.

shoulder, speaking in a foreign voice and with familiar laughter. The stone paths are wet from the afternoon rain. Dogs huddle away from the men as they pass and watch from the shadows until they are around the corner.

The homes are close together, some on top of one another. Cement floors grow cold and dirty without care. Adobe walls are inexpensive and are stained with smoke. The men walk underneath the Catholic church and through the plaza, only empty trucks and dogs occupy the area, watching the men quietly. The cool air is still, though the lake is moving with strange currents, making the stars dance in its reflection. The volcanoes are black, occasionally lit up by the lightning. Another storm is building energy within the highlands. Each man steps into a small canoe, rarely looking up. The rain is a given, as is the cold and darkness. These fishers leave their homes behind for the night, leave their town and live upon the strange currents, if only for a little while. ~ *June 29, 2006, Santa Catarina Palopó*

The fishers of Santa Catarina have adapted to the changes in the ecology of their lake. In one man's words, they "evolved from the lines and bait to the use of the nets. The nets have evolved from small throw nets to the long, stationary 'transmaya' that many men use today." Many in the survey, interviews, and conversations say the largest change in terms of fishing has been the changing species of fish in the lake. To catch more of the small fish to which the fishers and people are accustomed, they are fishing with large, long nets. Catarineco fishers have also been forced to seek more shoreline because of the lack of tule along their own. Chalet owners have the reed removed their view. Fishers from Panajachel lease a stretch of their western shoreline. The nets are about 10' wide and 200' long and fishers will set the early in the night at

preference. From the free list survey I did, Catarinecos and their neighbors generally perceive fishers to be self-employed and not very difficult. Other perceptions include: they sell fish to the restaurants, have low economic status and are somehow related to tourism. Farming and fishing are the two that are unanimously indigenous professions. The six jobs considered most likely to be an indigenous person doing are: fishing, farming, maid, launch driver, chalet guardian and construction. With the exception of construction, which is viewed as mid-paying profession, these kind of jobs are also viewed as the least paying.

These results seem to confirm the racial hierarchy that exists in Guatemala, not only that it exists, but that is institutionalized in the socio-political and economic sphere. These conditions are readily seen and understood by Mayans. How they feel about it is not revealed by a simple survey. Interestingly, there are Ladino spear fishers. Either this is unknown to people or spear-fishing does not occur to them when they think of a fisher.

CATARINECO FISHERS TODAY

~ The wood smoke was beginning to clear from over the town. Lights had been turned off for a few hours. A few street lights, gave a dull yellow color to small portions of the walkways that wind throughout the houses. The sites and sounds of night fill the alleys and the one street in town. A grey dog, long and awkward, huddles against a doorway, with blood drying on a torn ear and a puppy curled up underneath her tail. Hunger and fear are her reasons to be awake. Chickens call from inside their cages and on top of the rusty tin roofs, though dawn is not near. Men begin to appear walking in the alleys, down the mountain, leaning forward into the leather straps on their foreheads that hold rope tight around the bundles on their backs, wrapped in tarps. They walk, some alone, some shoulder to

People were also consistent in how they perceived the fisher's economic status as a low income maker. Often people gave a daily amount and (based upon the six-day work week that full-time fishers report) this created a range of \$20-\$80 as an average week. All the informants also reported that fishers have some sort of second job. The most frequent mentioned was agriculture, followed by construction and tipica sales. Many are in agreement that they are not making a lot of money, but are able to provide for a family.

The cost of supplies and tools has gone up more the price they sell their catch at. This is best exemplified in the change in price for a cayuco. This is a necessary item for every fisher, crabber or reed gatherer. The canoes are made on southern shore where suitable timber is. People from Panajachel, Santa Catarina, and San Antonio must buy them from the canoe makers in Atitlán, San Pedro and San Pablo (Tax 1953). I spoke with two retired boat craftsmen from Santiago. According to them, the trade is no longer practiced for the most part due to the cost of permits that they must buy from CONAP, an organization that they view as corrupt. Subsequently fewer boats are made. Those that are made are often "poached" from the jungle and usually sold to the wealthy as lawn ornaments. They reported that fifty years ago a lower-end canoe, one made of pino or avocado wood, would cost \$3. Today the same boat would cost at least \$200. Boats made of this material are also predicted to fail after two to three years. A boat made of sera wood or canu wood will last eighteen years, but they cost much more and few men have the expertise or time to make boats from this especially hard wood.

Informants believe that an indigenous person is more likely to be a fisher than a non-indigenous person. Most people also believe that it is a low paying job. By comparison, in Hinshaw's sample (1975:10), though larger and perhaps chosen differently has only one person whose first choice of profession is a fisher. My sample had no one select fishing as any

woven, is a mainstay in the tourism economy for Catarinecos. During the time that Tax was studying there, Santa Catarina was only beginning to participate in the tourist economy. Since the 1990's, the town and its people have been one of the most mentioned in Guatemalan tourist literature (2004). The towns nearby have also experienced similar changes. "Tourism now provides wages for more than half the economically active population of Lake Atitlán's northern shore towns and supplies the main market for most of the household arts and crafts produced by communities around the lake (Ratner 2004)."

Today, in both survey data and pile sorts, fishers were viewed as poor, indigenous men who were the last of their kind. Catarinecos were aware that there were only 45, or less, remaining in the community. Fishers who were fathers did not say that they would encourage their sons to be fishers. Their work is undesirable by others. Commonly people mention that the work of fishing all night long, in the rain and wind, is not worth the \$13 they might get. No one any longer chooses fisher as a preferred profession. In Santa Catarina though, the fishers are respected for their work and are often city councilmen representing their neighbors; despite this they are seen to have low economic status.

In a survey I made, I found that all the Catarineco respondents in the survey buy their fish directly from the local fishers or their wives. (The exception being the small boy who does not buy the food his family eats, but one of his family members was also an informant who bought fish twice a week.) Most people buy fish about twice a week. The prices were similar. They are buying fish for \$1.50 a pound. Two older men also informed us that you can buy bigger fish at \$2. Everyone had no hesitation about the price, the vender or the frequency at which they bought fish.

preyed upon by the laws were often those men that worked for subsistence such as small farmers who did not or could not produce cash crops and fishers.

During the 1960's, Catarinecos became more dependent on wage labor than almost any other indigenous community. In 1965, more than half of the households in Santa Catarina were migrating annually for the seasonal labor on the coast and along the highways (Hinshaw 1975:153). The Guatemalan government instated a law that obligated fishers to only work during certain months of the year. For the men that depended on the daily subsistence of fishing this was a deadly blow. Similar to the vagrancy laws of the 1930's, fishers were marginalized and forced to either break the laws or serve on distant plantations in order to provide for their families. One informant remembered all of the crabbers from Santa Catarina being incarcerated one night for 'poaching' during the new off season. We can see then that the fisher, being indigenous and dependent on the land, is easily manipulated by the political climate. Those fishers and individuals from Santa Catarina were especially vulnerable to these acts because of the lack of land upon which to farm, forcing them to often leave for wage labor.

Another informant, thinking back into the 1960's and 70's, remembered being recruited to work on the coast. He also commented that times become very hard for his family when the recruiters no longer came. Today, as one who visits can plainly observe, many Catarinecos are dependent on the tourist economy. Women weave, are in sales, are maids and work in the hotels and restaurants. Men sell tipica clothing and textiles, are drivers, chalet guardians, tour guides, and work in the hotels and restaurants as well.

Tourism is also a modern force that has proven influential. Santa Catarina has been considered as "fully incorporated into the main tourism routes in Guatemala for seventy or more years" (Little 2004). The selling of tipica, the traditional clothing and textiles that are hand

Following independence, Justo Rufino Barrios was elected to power in May of 1873. Barrios' interests were in economic development and gaining foreign investments. In reference to foreign investment, Barrios is quoted as saying that "100 foreign families were worth as much as 20,000 Indians" (Carlsen 1997:118). Coffee became the most important cash crops and exports for Guatemala and Barrios regarded the native population as simply a cheap source of labor for the growing agriculturalist economy (1997:118). A system of debt peonage was developed during this time and effectively secured the labor of many rural Mayans like those in Santa Catarina. Many Catarinecos became dependent on this seasonal labor, especially when the population boom induced the land shortages throughout the highlands.

"We were slaves because of the law of Ubico," recalled the next elderly peasant we talked to. He was referring to President Jorge Ubico, who had governed the country from 1930 to 1944, and the 'slavery' he described was not debt peonage but the vagrancy laws that had replaced it. "We had to carry a booklet, like an identity card, which showed what plantation we worked in and how many hours we had worked that year. If you didn't carry it, the government could jail you and make you work without pay." (Wilkinson 2002)

During the 1930's and 40's, Dictator Jorge Ubico instated anti-vagrancy and labor laws giving the power to incarcerate any individual who was not employed. Due to the lack of arable land and viable work, Catarinecos and other poor people began to scatter throughout the country in search of wage labor on coffee and cotton plantations just to comply with the laws (Little 2004:233). The results of these laws were that many men, and their families, were forced into labor as road builders and to work the cotton and coffee plantations on the Pacific Coast. Those

civil war did not end until the peace accords 1994-1996. During this violent era, the community of Santa Catarina remained fairly peaceful only having a few acts of intimidation brought upon them. Rather, here the concern shall be with those historical events that have had significant social, economic and political effects on Santa Catarina and its occupational fishers. They have played some role in the change of traditional activities in this community. Those significant ecological events that have occurred in the area's history will be discussed in reconstructing the ecological context later.

Ancient Mayan civilizations were thriving throughout Central America 2,000 years prior to Spanish contact. Katchikal language and culture has a long history in the western highlands and along the Western side of Lake Atitlán. To gain advantage over neighboring Mayan communities the Katchikal groups became allies of the Spanish in their conquest across the highlands. They aided the Spanish Conquistador Pedro de Alvarado in his brutal war against the Quiche and Tz'utujil Mayans from 1523-1527 (Stewart 2004:429). In spite of their alliance, the entire indigenous population of Guatemala was forced into subjugation under the Spanish crown and the Catholic Church until 1821. The colonial economy was based on large agriculture with emphasis on cacao, tobacco, cotton, and indigo (2004:430). Colonial rule, like in the US and Southern Africa, restructured the economic and social systems, and often established racial hierarchies whose legacies are still felt today.

“At the heart of the colonial economy was the system of repartamientos, whereby the ruling class was granted the right to extract labor from the indigenous population. It was this that established the system whereby the Maya population was transported to work in the plantations, a pattern –though no longer legally enforced, that remains a tremendous burden today.” (2004:230)

than passively accepting the first explanation that came my way. The widely accepted explanations, that often remain unquestioned, need to be discussed with some degree of skepticism. If we are to listen to the natives' view of and reasoning for the changes, then those simple explanations are drawn into question and shown to perhaps be formulated with an outsider's perspective. The holistic and descriptive explanations would not only take the outsider's perspective, but also take into account the natives' interpretations as well as place the discussion in some historical context. This combining of views and placing them within such a context became a constant overtone in the final analysis and writing process.

For health reasons, something almost every field worker comes to learn about, my physical activity was more limited I wished. I spent more time attempting to do a more thorough examination of the relevant literature and documentation conveying the lake ecology and fishing. I found myself searching the local libraries, bookstores, and homes for the limited number of documents that were reported to have existed. This time spent away from the fisher population limited my data about their daily lives. Rather, from the documents, I had a partial reconstruction of significant events and some of their influences on the occupational fishers and their waters. This brief ethnohistory was complemented by the observed and interview data to partially describe Catarineco methods and perceptions of fishing today. It is from this data and experience that I draw from and have summarized here.

HISTORICAL CONTEXT

The historical context reconstructed here is one significant for the indigenous people of Guatemala, the communities of Lake Atitlán and more specifically for Santa Catarina. The historical events of communities like Santiago on the southern shore are worthy of multiple books because of the violence and events that occurred there during Guatemala's civil war. The

the numbers of men crabbing has also declined. When people speak of fishers, and perhaps when past writers have mentioned them, they have crabbers in mind as well.

METHODS

The perceptions and stories of those individuals who were to be studied needed to be told. Their interpretation of why things are the way they are is an essential ingredient in forming a well-grounded analysis of culture and understanding of fishing in this community. I had a sample from the literature about what the outsiders' perspectives were. The fishers were viewed as an ever-shrinking group of native men plighted with the ecological mistakes of others. I wanted to listen to the fishers' perception of reality. I anticipated that some of it would correspond to the current literature, but I also predicted that there might be some degree of difference.

The flexibility and adaptability of both the anthropologist and his study's structure is essential. I conducted multiple interviews with both current occupational fishers and with men who had long since given up fishing as a source of income. I also used various participant observations of fishers' work and homes, surveys and pile sorts were conducted among the convenient members of the community and with a few subjects in Panajachel. This type of qualitative data would be better explained within an interpretive perspective. I also had background data, expert interviews, and a historical context that placed all the participants in a larger structure where they were all actively engaging and discussing the layers of influence. My efforts to place the fishers' perspective, as well as the individuals who directly interact with them, in the larger context of historical events and the other possible influences was an effort to synthesize, to some degree, the ecological paradigm and the interpretive paradigm.

Change became my key issue and the incorporation of past literature was an ongoing theme. Another issue was related to my pre-departure readings: obtaining a holistic view rather

kilometer. Many of the locals and foreigners living here say that the population is currently just over 3,000. Of the 2002 census 2,445 of the 2,869 people were reported to live in the urban area, while the remaining 424 persons were living in the rural hillsides above the community and along the northern and southern ridges.

In Santa Catarina Palopó, according to the 2002 census, the monthly wage that most families perceive is 600 quetzals to 1,000 quetzals, which equates to about \$80-\$134USD. (All remaining monetary amounts will be in USD.) Santa Catarina is considered one of the poorest areas in Sololá and categorizes a number of residences as living in extreme poverty. The main activity reported was farming maize, beans, and vegetables. The vegetables grown here include: tomato, onion, coriander, and in smaller amounts the Chinese pea and broccoli.

Santa Catarina has been renowned as a fishing community because in the past many of the men did one of three fisher activities. Crabbing is probably the most well known occupation for the men of Santa Catarina, as well as fishing and gathering tule, the native lake reed that grows in the shallows. Often men would do all three and are often all referred to as pescadors or fishermen. Women often wove clothing and made mats from the tule that the men gathered. Today the gathering of tule has completely stopped along the Santa Catarina shoreline. As far as fishers, there are reported to be only 45-50 men in the community that fished for at least half of their income. Residents and fishers alike say that there were many more in the past and fishers as a group were more influential members of the community in the past. Now only a few of them hold part-time, city, representative positions. Many fishers have second sources of income such as construction and agricultural work. For the sake of definition, I have included those who are part-time occupational fishers in the population. It is also important to mention that crabbers and reed gatherers have similarities to the fishers. Reed gathering has halted on the north shore and

other in fighting the erosion by building new stone walls and terraces, sharing cement and conducting similar home improvements at the same time. The adobe and block made homes were whitewashed in their youth but now have an off white hue from the dusty summers and daily wood smoke. Homes that are above the urban area are often small farming homes that are close to the small terraces of crops that separate Santa Catarina from “the wilds” of the mountains as the locals call them.

The urban area is 8 square kilometers and has been for sometime though the population continues to grow. Compared with other neighboring pueblos and by Guatemala standards, Santa Catarina is relatively small and land-poor (Little 2004). Early in the 20th Century, Catarinecos sold much of their surrounding agricultural land to outside parties as well as the shoreline to wealthy Ladinos and foreigners (McBryde 1947:123; Tax 1946:19). Most of the homes on the ridge and in the urban area are owned by the indigenous families. The outlying homes and those near the lake are usually owned by foreigners or “Ladinos”, however controversial that term is. Indigenous homes and buildings here are often constructed in a similar manner. Walls are predominately made from adobe, roofs are usually corrugated metal, floors are usually either cement or dirt. There were 505 homes in 2002: 471 with running water and 480 with electricity. Compare the 505 homes in 2002 to the 309 homes in 1994 and the 90 households in 1936, all in the same 8 km. area, and one can see that the densely populated community you visit today has not always been that way.

Santa Catarina is fairly small, though it is widely known as a highly traditional Katchikal-Mayan community. The population is 99.3% indigenous. According the municipal’s 2002 census, there are 2,869 residents of Santa Catarina with a density of 359 persons per kilometer. The municipality predicted, for 2006, a population of 4,326 with a density of 541 per square

chaparral and oak-pine forests. In the past animals living in the forests included quetzals, deer, jaguarondis, wild pigs, and jaguars (Carlsen 2004).

The northern mountains are the edge of a large plateau where many of the main highways run between the many highland communities of the region. The lake itself is 12 miles wide and 24 miles in length and at its deepest point is about 1,055' making it the deepest lake in Central America. Significant features to keep in mind within the future discussion about the ecology of lake include: 1) the lake has been very recently formed by the collapse of a volcanic caldera approximately 4.5 million years ago; 2) the depth of the lake provides a large volume of cold water; 3) it has only a small percentage of shallow shore habitat; and 4) there are no surface outlets (rivers) that flow from the lake, it is landlocked save for a small crack in the caldera that is the source of a small underground river.

Katchikal is one of over twenty dialects of Mayan language. The people who speak them are often distinct from other Mayan groups by both location and culture. Santa Catarina Palopó is a Katchikal-Mayan community of about 3,000 people that clings to the ridge line on the northeast corner of the lake. The mountains rise toward the center and briefly deepen into a narrow ravine. The mountains themselves are onlookers, dominating the landscape and anyone who may want to live beneath it. The ridge creates a floral green tea cup that holds the community closely together. The large placid body of water takes your gaze immediately to the volcanoes and cliffs along the southern shore. At this sight, the once intimidating ridge in Santa Catarina has an air of tranquility and gentleness.

The houses here are colorful and climb higher into the mountain. The paths are often cobbled sidewalks or dirt paths that gently rise onto the mountain and occasionally have the rigorous steps to which one must become accustomed. Neighbors can often be seen aiding each

STUDY SITE

Hendrickson and Fischer's introduction to the Guatemalan highlands seems fitting for the discussion here.

“A place of striking contrasts and deep contradictions, Guatemala eludes easy description. Visitors to this small Central American country (about the size of Tennessee but with an estimated population of just over 12.5 million) are first struck by the dramatic landscape of the highlands: rich green valleys nestled between imposing mountains, crystalline lakes surrounded by rumbling volcanoes- the evocative clichés of Guatemalan tourist brochures. It does not take long, however, to note the human contrasts as well, as the country is home to both some of the wealthiest and some of the poorest people in Latin America.”

(2003:1)

Human eyes have a difficult task when trying to look away from Lake Atitlán with its surrounding volcanoes and mountainsides. The large spectacle is a panoramic view that requires a number of gazes and moments as it cannot all be taken in at once. I was enveloped by its placid blue and rugged texture. Its beauty is probably the most commented feature about the lake. Lake Atitlán is a high mountain lake in the central highlands of western Guatemala. Its surface is at about 5,000 feet above sea-level and is surrounded by mountains that rise to 7,500 feet above the lake. Along the southern shore there are the Volcanoes Toliman, Atitlán, and San Pedro whose heights are close to 12,000 feet. The mountains and volcanoes create a limited amount of space for human habitation and production. Towns like Santa Catarina are now confined to a small parcel because both of geography and land sales. The native vegetation around the lake includes

of what remains to be done so that the stories of Lake Atitlán and its fishers are told more fully and are closer to the descriptive truth.

Within this fuller description we can see that indigenous traditions and culture have not been encouraged or valued by the national and international hegemony. For the last century, the Mayan population of Guatemala has not been provided with the means to continue their traditions. Rather they have been coerced and, in some cases, forced to join into the industrializing and modernizing of Guatemala. Examples will be discussed in the reconstructing of the historical context for the changes in traditional fishing on Lake Atitlán. The fishers' decline is also an interesting example as well because it is affected by ecological forces, both natural and man made. The geography of Lake Atitlán needs to be taken into account in explaining why fishing today is not a large economic or natural resource.

In describing this specific community and population, I hope to be adding to the larger discussion concerned with indigenous people and the effects of modernity upon their traditions. These modern forces act upon these cultures both taking away from and adding to their cultural resources. In our concern occupational fishers it is necessary to use ecological studies to complement and help explain the data that social sciences bring forth. We must also include the historical context in which groups of people have existed and passed through. It is within the historical and ecological context that a study concerned with the future policy-making and focus on occupational fishers should be conducted. It this melding of information that better enables anthropologists to advise policy makers and address issues of the well-being of our fellow human beings.

to farming and migratory work, with many of the women traveling to Panajachel and Antigua to peddle their weaving.” (2006:171)

Stewart’s book is a broad, tourism orientated piece of literature focused on briefing the traveler on the entire Latin American country of Guatemala. Despite this, his acknowledgement of the foreign introduction of the black bass in 1953 is, as far as I can find in the literature, the extent of explanation of why there are only approximately 45 Catarineco pescadors left. What was once a thriving trade for this small Atitlán community and was a great source of identity for the people that lived there, has, in a little over three generations, been reduced to a note in the unique antiquity of the place. The changes that have taken place in this community are significant. Specifically the traditional activities of fishing, crabbing, tule gathering and matt making have diminished greatly. These changes have been documented sparingly and deserve better examination and subsequent explanation. Such an examination adds to the larger discussion of the effects of modernity, tourism, ecological concerns, and policy making in reference to indigenous populations.

My purpose in this study is to begin a description of the ecological context and the historical context in which these significant changes in tradition have occurred and have resulted in the declining numbers of fishers of Lake Atitlán, Guatemala. The techniques, technology, and stories of Santa Catarina Palopó, a small Katchikal-Mayan town on the northeast shore, will be described and used as examples of what fishing is like today. The significance of this study is that it is an attempt to begin a broader and more holistic description of the reasons why fishing is the way it is there. It is also an early attempt to align the scattered and sparse literature about the topic, and is, in that sense, a brief ethnohistory of the Catarineco fishers. This is a small sample

him. Around us the daily storm built up energy to the south, darkening and folding behind the four volcanoes overlooking Lake Atitlán in Guatemala's western highlands.

I interviewed this Katchikal-Mayan man about his life. When the discussion had turned to the declining number of fishers and why he felt it had happened, he turned his wooden chair and took in the grand view of the lake and the majesty of the surrounding landscape. The crow's feet at the edge of his bright eyes tightened. After a few moments, with arms crossed, he looked down at the sawdust covering the red concrete, simply saying that, "One suffers when one fishes." He made an effort to make things lighthearted soon after, but the translator, an anthropologist herself, and I both knew that what he had said was no joke to him or any other man who had done the work of an occupational fisher on Lake Atitlán.

Sol Tax is considered one of the first to have given the communities of Lake Atitlán thorough study, those being in the 1930's. Tax was mainly concerned with a detailed description of Panajachel, a larger community approximately 4 km. to the west of Santa Catarina. He reports that Catarinecos, those men and women from Santa Catarina, specialized in fishing, crabbing, and reed gathering (1953:31). In a discussion regarding the popular canoes, Tax also mentions that Catarinecos were less likely to use them for transport as there was a "great fishing, crabbing, and reed matt making industry" that was greater than any of the other Atitlán communities. Robert Hinshaw's book described Panajachel thirty years later in 1975. He also mentions the fishers of Santa Catarina and the "specialized reliance on fish, crabs, and tule (reeds) which has diminished greatly in recent decades" (1975:167). Iain Stewart gives a recent account of the same phenomenon in his *The Rough Guide to Guatemala*:

"The people of Santa Catarina used to live almost entirely by fishing and trapping crabs, but these days the black bass have put an end to all that and they've turned

When One Fishes . . . Change & Tradition in Sta. Catarina Palopó, Guatemala

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Abstract

WHEN ONE FISHES... CHANGE AND TRADITION IN STA. CATARINA PALOPÓ, GUATEMALA Guatemala is a country with a history as turbulent as its landscape. In this violent and dynamic history, many stories and their documentation have been lost. Simplistic and popular explanations are readily available and accepted for many events. One example is the declining number of the occupational fishers on Lake Atitlán. These explanations fail to examine the ecology of Lake Atitlán and the social, political, and economic forces upon the fishers. In this paper, I begin a description of those forces, both historically and currently. The techniques, technology, and stories of the fishers from one lake-side community, Santa Catarina Palopó, will be described and are examples of what fishing is like today. The necessity of an ecological study and a more complete historical documentation of the lake and the fishers will be emphasized.

Keywords: Lake Atitlán, Guatemala, fisher, ecology, ethnohistory

INTRODUCTION

I smiled and shook Don Felipe's sturdy, calloused hand. With a weathered smile under his cowboy hat and subtle motion, he ushered me into a seat on the front porch of his small unfinished home. His new home rested on the northwestern slope of Santa Catarina Palopó. The walls and floors were as colorful as the traditional *traje* clothing that his daughter had made for