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**GENDER AND THE ENVIRONMENT IN THE GUAJARA DA
COSTA RIVER, BARCARENA, PARA**

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GENDER AND THE ENVIRONMENT IN THE GUAJARA DA COSTA RIVER, BARCARENA, PARA

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Abstract:

The region of Amazon proper spans about half of the land mass of Brazil, an area the size of the continental United States of America, and is therefore a varied area in climatic, ecological, economic, and anthropological respects. However, the general conception of this enormous area is usually couched in purely ecological terms in "northern" media and thought; i.e. invocations of *the Amazon* conjure terms like: tropical rainforest, biodiversity "hot spot", mighty river. Humans do live in the Amazon. In Brazil, there are two major pockets of human civilization in cities both on the fringe of the forest and at its heart, not to mention the Amazonian reservation system which bounds ancient indigenous groups. Despite the vast majority of anthropological literature focusing on these indigenous populations however, there are also other distinct rural groups that live, work, eat, sleep and love in the Amazon, which "call it home".

Keywords: River. Guajar. Barcarena.

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1 INTRODUCTION

The region of Amazon proper spans about half of the land mass of Brazil, an area the size of the continental United States of America, and is therefore a varied area in climatic, ecological, economic, and anthropological respects. However, the general conception of this enormous area is usually couched in purely ecological terms in "northern" media and thought; i.e. invocations of *the Amazon* conjure terms like: tropical rainforest, biodiversity "hot spot", mighty river. Humans do live in the Amazon. In Brazil, there are two major pockets of human civilization in cities both on the fringe of the forest and at its heart, not to mention the Amazonian reservation system which bounds ancient indigenous groups. Despite the vast majority of anthropological literature focusing on these indigenous populations however, there are also other distinct rural groups that live, work, eat, sleep and love in the Amazon, which "call it home".

One of these populations is among other names the *ribeirinhos* or riverine dwelling people, part of the larger and perhaps more pejoratively termed *caboclo* population of rural Brazil. The synthesis of the *caboclos* came with waves of colonization into the interior, the catalyst of this migration being generally economic and extractive, for example, the migratory pull for the extraction of rubber latex when rubber came into world demand. This process is described in the strong words of Ross with, "[...] Europeans imposed extractive industries upon an indigenous riverine population which they enslaved and deculturated [...]" (1978). Caboclos are described as a non-indigenous group with indigenous roots that display a deep knowledge of their natural environment. Indigenous, African, and European blood and culture came together to form the caboclo, however, as Nugent (1993) writes, "[...] caboclo society descends in anything but a straight line from aboriginal social formations" and, "The link between pre-colonial Amerindian societies and caboclo societies is not insubstantial, but it is extremely complicated and impossible to reconstruct in any but the sketchiest form."

Much of the literature on environmental issues in the Amazon focuses on the questions of deforestation and loss of biodiversity, and the potential impact of this environmental degradation on a large scale like global climate change. But, local human populations also feel the environmental effects of the grand projects that began in the 1970's and are continued today. It follows that humans are often seen as the villains in this area because of this recent environmentally destructive history, however it is becoming more and more clear through research and different modes of thinking that different human groups have varying impacts on their natural environments. The environmental practices of some groups have come to be valued as is evident in the formation of extractive reserves in the Brazilian Amazon, natural areas in which people live and practice their historically sustainable land use and extractive patterns.¹

Many ribeirinhos are artisanal fisher people and therefore extractivists. This is a group, which Maneschy (1995) writes, "... constitute a little visible social group in this region, although they represent in the state of Para only, almost 100 thousand people, who are responsible for 80% of the state fishing production." He goes on to state that "Much less evident, overall is the contribution of the woman in the domain of fishing" (SIMONIAN 2001). The following study was directed at just this idea, seeking to better understand the relationship between the environment and members of a community of artisanal fisher-people, and the difference that gender contributes in this relationship. The research was done on Trambioca Island (Barcarena, Para State), in the Guajara da Costa River community.

2 INTRODUCTION TO THEORY

In order to explore the relationship that humans have with their environment, it is necessary to understand the factors that shape this relationship. Humans and the environment interact in many ways. The author's usage of the term environment should be understood throughout this paper as the natural environment including climatic, geological, biological, and ecological factors.² This environment has its effects on human society, culture, geography, and economies and humans in return have their own effects on the natural environment, changing biological communities for example, and possibly global climatic patterns. First, the material effects that the natural environment have on culture will be discussed followed by an extension of this idea into the ways in which culture constructs understanding of the natural environment.

2.1 ENVIRONMENTAL IMPACTS ON CULTURE

The role that the natural environment plays in the formation of culture is a highly debated subject. By providing a variety of different climatic, geological, and biological factors, with and within which humans create societies and cultures, different places on the globe offer different resources and limitations to the human populations that inhabit them. The term adaptation is often invoked in the study of human ecology to describe the process by which culture is affected by the natural environment, how humans shape their lives and cultural structures around the offerings of their natural environment and ultimately how these structures also end up impacting the natural environment.

This adaptation itself is a dynamic process, as is illustrated here by Moran (1993),

The Indians and caboclo cultures of the Amazon have adjusted to the physical environment and to the powerful external forces that act within it. The degree of adaptation that each one may have achieved at a given moment will vary, as a function of historical, social, political, and economic forces that may have influenced it.

Undeniably, the natural environment offers different resources to be used by human populations. i.e. a

river may offer potable water an array of edible aquatic life etc. while a forest may offer trees for wood, fibers, and food, and an array of edible fauna. This outcome affects the population's modes of production, making them rely on different elements of their natural surroundings in different spheres of life. This more broadly shapes the overall relationship between humans and nature and the way in which a human group constructs its concept of nature.

2.2 CULTURAL CONSTRUCTION OF THE NATURAL ENVIRONMENT

As Kaplan and Mannings (1975) write: “The environment is not a natural thing, it is a nexus of inter-related perceptions, a product of culture.” This quote presents another dimension of the connection between the natural environment and culture. Nature does not stand alone, it is a human concept, and as such, the ways that people relate with their natural environments will be contingent on the cultural beliefs and values present in the construction of nature. For example, in the “western” paradigm of nature, nature it is seen as separate from and valued below culture. This is referred to as the nature-culture dichotomy, and leads to a distance between humans and their environments, and further a potentially dangerous distance as the added hierarchy of value can justify exploitation.

This separation is not evident in all cultures, and indeed there is a long continuum along which these two concepts of nature and culture blur more into a directly related whole. Therefore, in conservation and sustainable development work, fully any work hoping to ameliorate destructive relationships between humans and their natural environments, it is crucial to understand how people relate to and understand their natural environment. In this way one may understand the thought and culture behind environmentally impacting actions and uncover already held sustainable-use practices more appropriate and ingenious than what an outsider could offer.

Cohen (1976) describes a framework for understanding the way in which humans relate to their environments in terms of humans’ instrumental, territorial, sentimental and symbolic orientations towards the environment. To briefly elaborate, the “instrumental orientation” relates to the resource potential of an area, the “territorial” to human control over an area, the “sentimental” to “the sense of attachment” that a human or human community has to an area and the “symbolic” to the significance that an area holds to an individual or community. The instrumental and sentimental orientations are important to highlight in terms of this study, because of its focus on the environmental experience of extractive populations and what gender contributes to this experience.

The instrumental orientation refers to the perceived resource potential and therefore economic potential of an area, and around these factors the human or community’s relationship is formed. The sentimental orientation touches on the subject of identity as Cohen (1976) explains,

I assume that this sense of belonging (to the natural environment) forms part of the

person's over-all identity. It could be said that it is the ecological facet of his answer to the question "who am I?" If so, the mechanisms through which the sense of belonging is formed are the very mechanisms, which form the person's general sense of identity: socialization, education, acculturation, etc. Through the action of these mechanisms, the individual comes to identify more intensively with some points or areas in space and less intensively with others, while remaining neutral to or even rejecting emotionally the rest of the environment.

Therefore, both cultural and environmental factors contribute to identity, and this is unimportant point to note, especially with the question of environmental change. If identity is tied to a person or communities' natural environment, this identity could be impacted by environmental change.

2.3 GENDER WORK AND THE ENVIRONMENT

This study focused on two main social and/or cultural factors, themselves inter-related, that go into shaping ones relationship with the environment: gender and work. Gender, which should be understood throughout this paper as socially constructed differences between the sexes. Fundamentally, it affects the experience that is living life. By affecting the role that one has in their society, gender also affects how one relates with the natural environment.

2.3.1 Ecofeminism

Academic ecofeminist thinking forwards that in western culture, the divide between the constructions of man and woman presents itself in a split between "woman" associated with emotionality and nature, and "man" associated with rationality and culture. Following this idea, an ecofeminist argument arises stating that because western patriarchy connects women with nature while concurrently exhibiting "antinatural" tendencies embodied in the value laden nature-culture dichotomy and demonstrated in exploitation of nature, it will therefore "... doom them (women) to an inferior position..." and lead to their degradation as long as nature is degraded (STURGEON, 1997). Also, gender differences lead to different working roles in the community, which leads to different contact and therefore relationships with different parts of the environment. This can also lead to differing experience of environmental change.

2.3.2 Work and the economy

A person's work affects which parts of the environment are a part of one's life and what value these environmental elements have. If one engages in subsistence extractive work, the environment will have resource value in terms of survival. If one extracts for the market, this resource will at least partly be defined in economic terms. Both of these realities are impacted by the economic culture in which one is situated.

As Escobar (1995) writes in relation to modernization, "Many aspects of life became increasingly economized, including human biology, the nonhuman natural world, relations among

people, and relations between people and nature”, and “People and nature are separated into parts (individuals and resources), to be recombined into market commodities and objects of exchange and knowledge”. These quotes present a framework in which the natural environment is often seen, related to the instrumental orientation discussed above: nature as commodity with economic value. If one engages in extraction for the market, this natural resource will have a monetary value, which will make it less directly related to survival by providing the monetary medium to buy items necessary for survival.

2.3.4 Objective

The objective of this study was to explore how gender, by affecting one’s social role, affects one’s relationship with the environment. There is an implicit belief here that gender does affect one’s relationship with the environment. Specifically, the aim of this study was to better understand the link between gender and the environment, a topic which is still little explored, and to contribute to work being done to recognize and validate the extractive culture of this community of *ribeirinhos*.

3 INFORMATION ON THE COMMUNITY AND ITS NATURAL ENVIRONMENT

The Guajara da Costa River is a fishing/shrimping community on the northwest coast of the Trambioca Island. This island is directly north of the City of Barcarena and concurrently part of the Municipality of Barcarena, as can be seen in Figure 1. The area is considered part of the Amazonian estuary, which stretches east from the mouth of the Xingu River to Marajó Island. The community itself occupies an area of igarapé/streamlet and to a lesser extent terra firme that opens into the Bay of Marajó, the immense Marajó Island only a faint silhouette of treetops in the distance.

As Simonian (2002) writes, “In the Amazon, it would be difficult to specify a date to be taken as reference to the period that began extractivism. At this point, indigenous societies should be remembered for their pioneerism (BALEÉ, 1993; POSEY, 1996) and for their contribution to the production and spread of knowledge in reference to the use of these riches. The current extractive culture of the island’s population and the move to make the island an extractive reserve attest to its populations’ long history of extractive activity. Beginning with the activity of its indigenous inhabitants and then further galvanized during the colonial period through fishing, and rubber extraction during the rubber boom, the population is now marked as pointed by Lira and Santos (apud SIMONIAN, 2002).

With approximately 40% of its entire population of around 198 people practicing artisanal fishing, the focus of this community is the river (SILVA, ALBUQUERQUE 2002). Tidal influence in this estuarine area means twice-daily floods that move water and nutrients and bathe the banks of the river and flood stretches of forest. Figure 2 shows "low tide" and the *matapis* (shrimp traps) standing

along the riverbank. The nutrient richness and protection provided by the matrix of flooded trees and roots makes for a highly productive area in terms of aquatic life. Fish such as, jeju (*Hoplerythrinus unitaeniatus*), mandil (*Pimelodus blochii*), and jacunda (*Hemiodus microlepis*) as well as the dominant shrimp species, camarão canela or amazonic (*Macrobrachium amazonicum*), are a major part of the diet and the economy of the area. In Figures 3 and 4, one can see a local shrimping woman and her daughter with her matapis, and a man collecting shrimp from a matapi in the Guajara da Costa River.

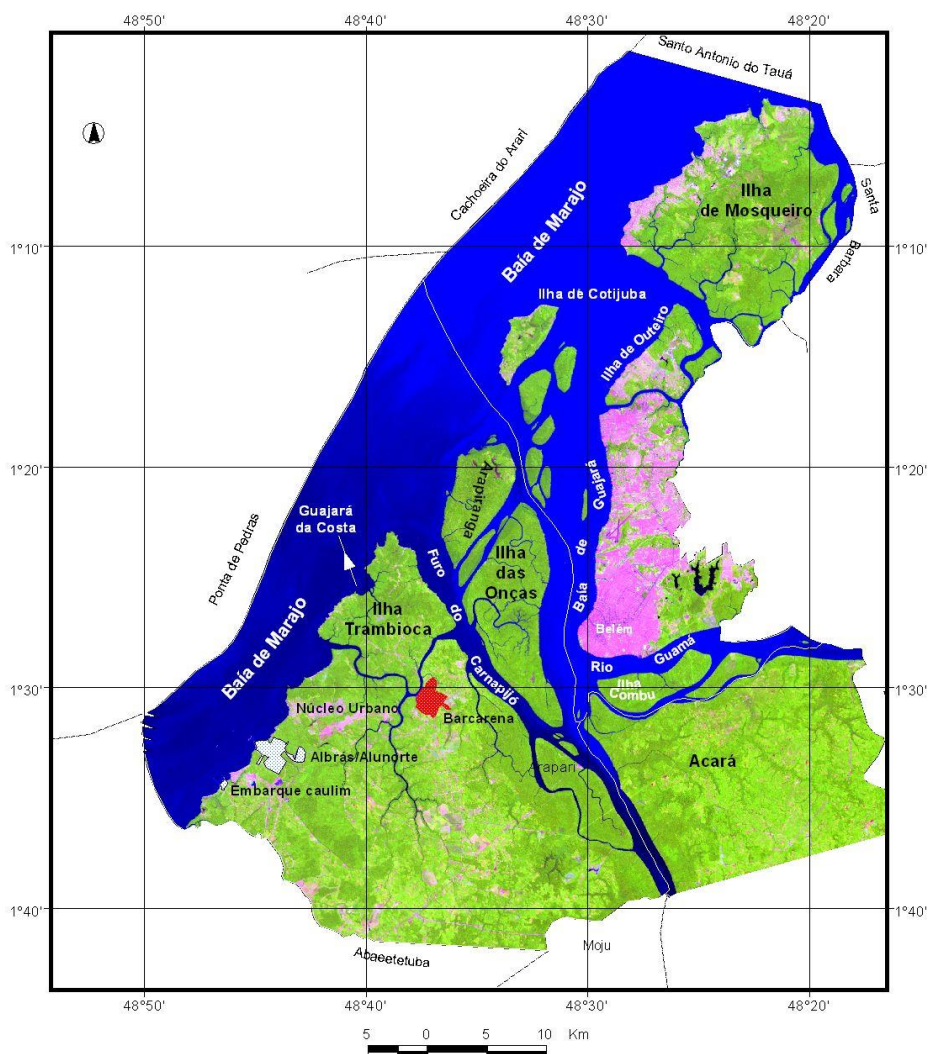


Figure 1 - Trambiocca Island in relation to the municipality of Barcarena and the surrounding area. Source: LANDSAT's image, órbita 223, point 61,5R4G3B; Simonian 2002.

Organized by L. Simonian and C. Romano Ramos, 2005/LAENA-NAEA-UFPA.



Figure 2 - Low water and standing matapis. Morris, personal archive/p. a., 2003.



Figure 3 - Mrs. Maria Alda Lúcia Ramos, 41 years old, matapis and daughter.

Source: Morris, p. a., 2003.



Figure 4 - A shrimping collecting shrimp from a matapi. Source: Morris, p. a., 2003.

Terrestrial resources are also important to life. Among them one finds cupuaçu (*Theobroma grandiflorum*), lime (*Citrus sp.*), caju (*Anacardium occidentale*), banana and pupunha (*Bactris gasipaes*) being the most commonly extracted food items, and açaí (*Euterpe oleracea* Mart.) being an important food item and source of income. As well as these food sources, the forest offers andiroba palm (*Carapa guianensis*), used for the extraction of medicinal oil, and babaçu palm (*Orbygnia phalerata martiana e oleifera* – AREACACEAE) for shrimp bait. Simonian (2002) also identifies the importance of various palms like the jupati (*Raphia vinifera*) and the cipó titica (*Heteropsis sp.* – ARACEAE) for textile uses such as basketry and the crafting of matapi.

During the shrimp season, which currently stretches from May to July, the average price for shrimp is R\$1/kilogram in Barcarena, however the author was told that the price that could be achieved in Belem is significantly higher. The reason for this low price may be reflected in a quote presented by Moran (1993) that, "...the value of products from rural areas is lower in order to benefit the urban populations. This is literally an income transfer from the rural to the urban areas that ensures the impoverishment of rural people". Certainly, the invisibility of Caboclos, or their marginality in terms of research projects and development initiatives, a topic that has been forwarded by some authors including Nugent (1994), is evident in this community.

The Guajara da Costa River has no health post, public telephone, or access to an electrical grid, however one family has a cellular phone, and people use gas-powered generators. While the

community itself is geographically not prohibitively far from Barcarena, no more than 8 kilometers “as the crow flies”, lack of extensive transportation infrastructure to this extent of the island means transport difficulty (See Figure 1 above, and Figure 5), especially regarding the po-po-po boat style. The two options used and noted by the researchers were a one-two hour boat (motor) ride or about an hour canoe ride to a bus stop to take an approximately one hour long bus ride which happens twice a day, once at about 6AM and the other at 2 PM. Therefore, in the case of emergency medical problems, access to emergency health care is impeded by insufficient transportation and difficulty being attended to at the hospital in Barcarena.



Figure 5 - These canoes or montarias are used for shrimping and in daily life, including trips to Barcarena³. Source: Morris, p. a., 2003.

Along these lines of issues faced by the communities on the island, Lopes and Simonian (apud SIMONIAN, 2002) write that,

[...] According to the understanding of many fisher-people and other residents, the pollution of the rivers, invasions into fishing zones, disrespect for the periods in which fishing is prohibited to keep stable populations, and the intensification of industrial fishing have to be confronted immediately. Of the environmental problems identified on the island, the pollution of the rivers and the lack of fish is one of the most expressed.

In relation to general community problems, the most identified according to Silva and Albuquerque (apud SIMONIAN, 2002), were a high cost of living/unemployment/economic issues, sickness in the family, lack a medical attention by doctors in the city, discord between families, and a lack of fish. These problems in general permeate the lives of most of the families, which tend to be of medium or large size, as the one that appears in Figure 6.

³ See Boropo on the right corner, moving a canoe; also the other one ready to be used in shrimp collecting.



Figure 6 - A fisher family, who live nearby the mouth of the Guajara da Costa River. Source: Morris, p. a., 2003.

It should also be noted that there are Albras and Alunorte processing facilities in the area, approximately 10 kilometers Southwest of the community, that are suspect to some people of contamination of the land and water in the area. However, formal statements by these two industries cannot substantiate this claim. Also, important to mention is that researchers from the Federal University of Para are currently involved with the community in the process of turning the entire Trambioca Island into an extractive reserve (Resex).

4 METHODOLOGY

The study was conducted in the community of the Guajara da Costa River, a shrimping/fishing village on the Northwestern coast of the Trambioca Island, north of Barcarena, Pará. Both women and men representing shrimpers/fishers and non-shrimpers/non-fishers were interviewed. In all 21 people were formally interviewed spanning an age range of 25 to 75.⁴ Of those interviewed, 6 of the women were involved with shrimping, 6 of the women were not involved with shrimping, and the 10 men were all involved with shrimping. Informally, 3 men no longer involved with shrimping were spoken with. All of the people interviewed were part of the Guajara da Costa River Artisanal Fishing Association, a group representing the fishing contingent of the community, formally formed in June of 1997 with a main aim to ease the funding of projects in which they want to be part. The author lived with a family in the community that included the president of this association.

To extract a general sense of the community, 2 preliminary formal interviews were done on

⁴ See Appendix 1, for the interview form in entirety.

the first full day in the community, and the researcher had informal conversation with community members throughout the period of research. Interviews were conducted at the respondents homes during the day, as the researcher found the respondents. This meant that in some cases children and spouses were present. In the cases of spouses, the husband generally monopolized the interview and these results are counted as male results.⁵ The interview questions were meant to highlight a number of indicators about a person's relationship with the environment, as well as provide basic demographic information and information about work in the community. Specifically, the questions directed at a person's environmental conception were meant to illuminate:

- if and how gender affects how one sees the environment as a part of ones life,
- if and how gender affects how one defines the word environment itself,
- if and how gender affects if, and in what parts of the environment one sees environmental change.

The questions about work were meant to give basic information on how gender affects daily life and working role in the community and they were meant to illuminate:

- how gender affects division of labor
- how gender affects what one does during the day
- if and how gender affects definition of the word work
- what people see as the most important work done for life in the community.

The researcher also took field notes on observations of the interviews and daily life in the community.

5 RESULTS

The results presented here are those that are pertinent to the following discussion, for full results see Appendix 2. For a description of limitations met during the research that may impact these results see Appendix 3.

RESULTS ON ENVIRONMENT-RELATED QUESTIONS

⁵ For the exception, see Appendix 2.

Question 11. For you, what does the word environment (*meio ambiente*) mean?

Table 1: Whether or not people answered the question

	Answered	Did not answer
Woman	6	5
Man	8	1

Table 2: How many people used these concepts in their definitions

	Conservation	Degradation	Restoration
Women	4		1
Men	7	1	
	Land	Other*	
Women		1	
Men	1		

Additionally, 1 woman and 2 men used the term nature in their definition of the environment, and one man used the term *respeito* (respect). One man and 2 women also used the term *reserva* (reserve), one man and woman used it in conjunction with *natureza* (nature) and one woman used it in conjunction with *floresta* (forest).

* This women responded with “*é tudo pra gente*” or “it is everything for people”.

Question 13 a. In what way are the river and forest a part of your life?

Women- farming (*roça*, *lavoura*), *trabalho* (work), living (*mora*), *açaí*, wood, things used for shrimping (*matapi*)*, shrimp (*camarão*), water (*água*), food (*alimentação*), survival (*sobrevivência*), *caça* (hunting), *fruteiras* (fruit).

Men-transport (*transporte*), *trabalho* (work), *açaí*, things used for shrimping (*matapi*), charcoal (*carvão*), fish (*peixe*), shrimp (*camarão*), food (*alimentação*), survival (*sobrevivência*), *caça* (hunting).

*The forest elements needed for shrimping included *babaçu*, *folha dura* and other less utilized types of leaves, and *jupati* for *tala* (twine).

Question 14. Have you noticed any changes in the river and the forest during your time living here?

Table 3: Yes/no answers on the natural resources' changes

	YES	NO
Women	8	3
Men	8	1

Table 4: Where this change has been noticed

	Shrimp harvest	Water	Trees
Women	3	2	1
Men	2	4	1
	Road	Degradation	Farming
Women	1		1
Men		1	

Question 17. What do you like about life here?

Table 5: Number of people who answered specifically or with the general answer

	Specific answer	General answer
Women	7	1
Men	8	2

Table 6: Number of people who used these words in their response

	Tranquilo	Clima	Rio	Temperatura
Women	4	1	1	
Men	3	3	1	1
	Natureza	Praia	Saúde	Gostoso
Women	1	1	1	1
Men			1	
	Puro	Matapi		
Women		1		
Men	1			

One woman responded with: *família* (family), *danças* (dances), *cerveja* (beer), *trabalha* (work). Three people made comparisons to the city within their responses.

Question 20. Has Albras affected your life here?

Table 7: Answers with yes/no

	Yes	No *	Don't know *
Women	2	4	1
Men	5	2	1

*The people who answered no and don't know expressed insecurity about the future in relation to this question of pollution

In what way?

Table 8: More specific answers from those people who answered yes to the question 20

	Fish	Vegetation
Women	1	
Men	3	1
	Water	Health
Women	1	
Men	2	1

5.2 RESULTS ON WORK-RELATED QUESTIONS

Questions 2, 8, and 9 - What do you do during the day?/What jobs do the men do?/What jobs do the women do?

Women - civil servant (funcionária pública), livestock (criação), açai, childcare (cuidar das crianças), basketry (paneiro), food preparation (preparar comida), teacher (professora), washing clothes (lavar roupa), shrimping (matapi), tending to the garden (quintal), collecting water (água), farming (lavoura/roça), housework (serviços da casa/cuidar da casa), making fishing net (tecer rede), health care representative (saúde). Men - civil servant (funcionário público), açai, shrimping (matapi), charcoal (carvão), fishing (pescador), cutting wood (madeira), farming (lavoura), carpentry (carpintaria).

Question 10. What do you think are the most important jobs for life here?

Table 9: presents how many times each was mentioned by the gender category

	Fishing	Shrimping	Açai

Women	4	2	1
Men	6	2	2

Additionally, one woman identified teacher as being the most important job for life in the community, and another identified *serviços do rio* (jobs of the river).

Of the three non-fishing women who answered this question, 2 answered with fishing and the other with *serviços do rio*.

6 DISCUSSION

To begin, it is clear that this community is highly reliant on its natural environment both for food, and for work and the related market-valued goods. The population of the island has a long history of extractivism and at this point, the natural environment presents itself in terms of commodity and survival. Açai, shrimp and fish are all both key food items and the basis for their economy. Life in Rio Guajara da Costa cannot be disassociated from the natural environment, unlike in urban areas where since people generally do not need to work directly with the land and water to secure food this can happen to varying degrees. This connection between the human community and the natural environment is supported by the fact that everyone interviewed identified the natural environment as a part of their life.

6.1 GENDER AND WORK

To a certain extent, gender affects which parts of the natural environment hold a place in one's life. According to Furtado, there exists in some traditional Amazonian communities, "...a bipolar model of sexual division of labor that characterizes itself through the emphasis given to the distinction of the activities and of the spaces associated with the genders"^f (SIMONIAN, DUARTE, 2002). This will generally place women in the home and its close surroundings with the children doing the work associated with the home, and men further into the public sphere, working outside of the home. In this community, however there is an interesting break along this gendered division of labor in that shrimping is an activity that both women and men do.

This shared duty happens in a variety of forms for example, collaboration between husband and wife, a wife shrimping when the husband is away fishing for extended periods of time, or one spouse shrimping when the other has fallen ill or died. It is interesting that gender has not created strict divisions as to who can and cannot shrimp; part of the reason for this is that there is a much more strict division between who fishes and who does not.

As Lira and Santos write, “They (women) exceptionally are involved in fishing “pra fora” (by boat, in open water, relatively far from home).”⁸ (Simonian 2002) Men fish, and this can mean their absence from the home for long periods of time depending on how far out they go to fish and how much they catch during this time. And, without them at home to provide food daily, women need to fill this role. Shrimping serves this need because it can basically serve as an extension of housework as spatially the shrimp traps themselves can be and usually are placed directly in front of the home near the bank of the river. Although no women in this study mentioned fishing for fish as part of their daily life, Simonian (2002) states that women on the island do a certain amount of subsistence fishing in the igarapés. Again, this women’s fishing is done for subsistence, while the fishing of the men can be both for subsistence and commercially.

The jobs identified as the most important for life in the community by both men and women were fishing, shrimping and the management of açaí. Fully everyone who answered this question save one female shrimper who answered with “teacher” mentioned these activities that involve the natural environment and provide sustenance and commodity. It should also be noted that more men and women identified fishing as the most important job to life in the community, which could indicate a traditional valuation of men’s work that is connected to the market. As it can be seen in Simonian (2001), such a reality should be taken into consideration as development policies and actions are proposed/implanted in one area and/or one specific ethnic/cultural group.

As presented earlier, the commodification of nature is one way in which relationships between humans and the natural environment are formed, however in this case the commodities are also daily food items which gives them both economic and survival value. Lima-Ayres (1992) presents this idea within a broader framework, “Although caboclo economic production has always been characterized by two spheres of production, the relation between production for consumption and production for commercial exchange has been variable both in space and time”. This environmental and historical approach is important to take into account as this community has been and will continue to be affected to varying extents by both environmental and market forces.

6.2 GENDER AND THE ENVIRONMENT AS A PART OF LIFE

Materially, the above discussion means that men identify fish and shrimp as a part of the natural environment that is a part of their life, however only two woman answered the question, “How are the river and the forest a part of your life?” with fish. Five women answered with shrimp, and this could be indicative of the fact that women shrimp and do not fish while men shrimp and fish. Other than this, only men answered this question with *carvão*, an indication of a gendered division of labor that makes men involved in the production of charcoal. Women use charcoal for cooking, however as it is not a direct part of their production, it was not primarily identified as an important element of the

natural environment in everyday life. They identified water as a part of their life that comes from the natural environment, while men did not, and this indicates that women fetch water and use water during the day in a different way than do the men. Women use water to wash clothes, prepare and cook food, and clean, while men may not have this same contact, instead equating water with the river and fish, as opposed to daily life on land.

Along with this, women identified living and working as a way in which the natural environment is a part of life. On the other hand, men only identified such phenomena as working, and this may speak to the fact that women's work is based in the home and *sustains daily life* on the land. Yet, to men, their work is more based on *production* from the river.

6.3 GENDER AND ENVIRONMENTAL CHANGE

Gendered division of labor has been found to create a difference in the way that people feel environmental change. It emerges from the discussion above that gender leads one to identify more with certain parts of the environment than others. Sturgeon (1997) writes of certain ecofeminist views, "By looking at women's dominant roles in agricultural production, the managing of productive resources for household economies, cooking and childcare this position maintains that environmental problems are more quickly noticed by women and impact women's work more seriously". This study did not illuminate any glaring supportive findings to this idea but may have found that gender roles in this community could contribute to the inverse.

The question phrased "Have you seen any changes in the river and the forest?" did not turn out significantly gendered responses however the responses to the question specifically about possible effects of the Albras facilities did offer a more considerable difference in terms of gender. More than half of the men identified this industry as having affected their lives in the community, while 2 of the 7 women who answered the question identified effects. One can assume that if Albras has in fact had an impact on water quality in the area, the men who fish farther away from the community and consequently on an open body of water that is shared with the facilities could be expected to notice these effects before the women. However, it was noted during the research, that many people fear to manifest their views or reveal their experiences, as this enterprise is very powerful and has close connections with the municipal and state authorities.

6.4 RELATIONSHIP WITH THE WORD ENVIRONMENT

Another important finding is in the significance of the word environment to this community. The gendered difference found in the responses was that about half (5 of 11) of the women asked to give their interpretation of the definition for the word *meio ambiente* (natural environment) did not respond, saying that they did not know how to respond or that they did not have much education and

therefore did not know how to respond. The one man who did not respond did not mention any lack of education. One couple described that people give lectures and use this term a lot in such presentation however would never define it and therefore this couple could not be sure of the proper definition. Of the definitions given, only one fit the academic definition that has been used throughout this paper. The majority of definitions invoked the ideas of conservation, preservation, and care for an area, while others mentioned other human impacts on a natural area.

The Portuguese expression *meio ambiente* seems to be sort of forced extra-cultural language because there was significant insecurity in the meaning and it was defined almost only with words that are often associated with the concept of and issues related to environment but do not generally fit in the academic definition itself. This may mean that the word has been imposed on the community through media, the work of people involved in development initiatives, and the educational system. It also reveals people claiming their own meaning for a word more common in the parlance of the dominant culture and less in their community and lives.

Three people used the word *natureza* (nature) in their definitions of *meio ambiente*, and when asked to define this word, the definitions were much closer to dictionary definitions familiar to the researcher. This is apart from the fact that they *used* this word in their definitions, which itself is significant because there is therefore some understanding and comfort in it. The definitions of *natureza* included descriptions relating to a lack of people, and invocations of God's creation. Since only 3 people gave a definition for nature, more study should be done into the meanings of the words "environment" and "nature" and the split between the indication of environment as human-altered space and nature, as could be preliminarily indicated in the few responses, as human-free space. If development work is to be done in this community concerning environmental issues, the author considers it important that people presenting about environmental issues understands that *meio ambiente* is not a universally defined term and that they need to define it to understand their work.

6.5 SPACE AND IDENTITY

When asked about what people liked about life in Rio Guajara da Costa, both men and women answered with environmental factors including the climate, the temperature, the river, the beach, and nature. Since the number of people who answered the question specifically as opposed to generally, and in this environmental way, is so small overall (4 of 7 women and 2 of 9 men), serious conclusions cannot be drawn along gender lines. It is however significant that the natural environment is something that people identifies as a part of their life in the community, let alone something they enjoy about this life.

Another point that it is important to mention is that 3 people in the formal interviews

compared life in Guajara da Costa River to that of the city in their response to this question, and 7 people described the community as calm, tranquil, or peaceful. This is some indication of a binary in thinking in their conception of the natural environment, that of urban vs. rural. It also speaks to the connection that this community has to the city. To the northeast the light that the urban node of Belem exudes is easily discernable in the night sky, and at least one person per family takes a trip into Barcarena at least once per week. People's children and relatives live in other areas and cities, but the people with whom the author spoke who live in Rio Guajara da Costa generally like life in this community.

This is all tied to the environment and identity link. As Lima-Ayres (1992) writes of caboclo communities, "The ecology of settlements constitutes an important attribute of identity [...]". To connect this to the above discussion of modes of production, the people of the community are inextricably tied to the natural environment for their work and survival. Also, people see elements of their environment as a part of life in the community, and in addition, see them as agreeable elements. In some cases they describe things that they like about life in Guajara da Costa River in comparison to life in the city. This all indicates that people identify with this rural riverine space, and therefore it is a part of who they are.

7 CONCLUSION

The members of the Guajara da Costa River community depend on their environment for their livelihood. The importance placed on extraction from their surrounding aquatic and terrestrial landscape lends them a certain identity of river valley dwelling fisher-people, an identity that could be validated through the development of the island as an extractive reserve. Meanwhile, commercial fishing in the Bay of Marajo is encroaching on their shores and possible pollution from Albras could threaten their water and its riches.

Even with an extractive reserve, these two factors could still well impact the environment of the area, and therefore the human population. By damaging the community's extractive resource base, this pollution would crack away at the viability of extractivism in the area. Because, as the authors have forwarded earlier, extractivism and the natural environment play into identity and identity construction, this environmental degradation could be seen as a threat to identity.

Populations all over the world, especially those of the poor and minorities feel the effects of industrial pollution and environmental degradation, but because of the grossly uneven power differential usually in place between marginalized communities and industries and corporation, these effects are rarely acknowledged or remediated. As Moran (1993) writes, "[...] living close to nature has its perils-but no more than living close to Europeans and their descendents". This quote is in

reference to indigenous communities, but this point can speak to any marginalized populations and their relations to the dominant class.

The Amazon has been constructed by “the North” in terms of ecological prowess and mystery, and undeniably to these eyes the region has vast biodiversity, vast amounts of natural resources, and incalculable beauty. It seems well understood that human actions are causing indelible environmental change, but how the effects of environmental degradation are reflected back onto human populations has been less explored. We need to acknowledge not only the ways in which humans are exploiting the environment but the ways in which humans are manipulating and exploiting each other through the intermediary of environment. The anthropological aspect of the Amazon must become and stay a part of the dialogue.

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Notes

- 1 On order to keep a more limited scope in this paper, a full history and description of the history of extractive reserves and the process of implementing them will not be given here. For more information on extractive reserves see the environmental Brazilian government

website <http://www.meioambiente.gov.br/port/sca/ppg7/capa/index.html> or search the web for Brazilian Institute of the Environment and of the Amazon – Instituto Brasileiro do Meio Ambiente e da Amazônia (Ibama) and/or Extractive Reserve (Resex).

- 2 The authors acknowledge that this definition upholds the split that western culture has designated between nature and culture (the “nature/culture dichotomy”), environment defined in natural as opposed to human terms, but for ease of language and understanding it will be used.

APPENDICES

Appendix 1

Translated Citations in Portuguese

- a. “[...] constituem um grupo social pouco ‘visível’ nesta região, embora representem somente no estado do Pará, cerca de cem mil pessoas, que respondem por 80% da produção pesqueira estadual. Muito menos evidente, contudo, é a contribuição da mulher no domínio da pesca.”
- b. “O ambiente não é uma coisa natural; ele é um conjunto de percepções inter-relacionadas, um produto da cultura...”
- c. “Na Amazônia, difícil seria precisar uma data para ser tomada como referência ao período que começou o extrativismo. Neste ponto, as sociedades indígenas devem ser lembradas pelo pioneirismo (BALEÉ, 1993; POSEY, 1996) e pela sua contribuição na produção e divulgação dos saberes referentes ao uso dessas riquezas.”
- d. “[...] numa organização bastante específica, fundada na pesca e na exploração florestal.”
- e. “Assim, segundo o entendimento de muitos pescadores e/ou outros moradores, a poluição dos rios as invasões das zonas de pesca, o desrespeito ao período do defeso e a intensificação da pesca industrial têm que ser imediatamente enfrentados. Dentre os problemas ambientais identificados na ilha, a poluição dos rios e a falta de peixe é um dos mais expressivos...”
- f. “[...] modelo bipolar sexual de divisão de trabalho que se caracteriza pela ênfase que é dada à distinção das atividades e dos espaços de acordo com os gêneros.”
- g. “Elas, excepcionalmente se envolvem na pesca ‘pra fora’.”

Appendix 2

Interview

What is your name?

How old are you?

Do you have children?

What are their ages?

Do you have a wife/husband?

How old is she/he?

What does she/he do?

1. For how long have you lived here?

2. What do you do during the day?

3. What do you need to do for shrimping?

4. For how long have you fished here?

5. Do you sell anything? What? How often? Where? For how much?

6. Have you seen any changes in the shrimp during your time fishing here?

7. For you, what does the word *serviço* / work mean?

8. In general, what do the men in this community/area do?

9. In general, what do the women in this community/area do?

10. What do you think are the most important types of work for life here?

11. For you, what does the expression *meio-ambiente* / environment mean?

12 For you, what does the word *natureza* / nature mean?

13. Are the forest and the river a part of your life?

13 a. In what way?

14. During your life here, have you seen changes in the forest and river? What type of change?

15. During your life here, have you seen changes in what the men do?

16. During your life here, have you seen changes in what the women do?

17. What do you like about life here?

18. Is there anything you don't like?

19. Do you think this community has any problems?

20. Do you think the Albras factory has affected your life here?

Entrevista

O qual é o seu nome?

Quantos anos tem?

Tem filhos? Idades?

Tem um marido/uma esposa? Idade?

O que ele/ela faz?

1. Por quanto tempo você mora aqui?

2. O que você faz durante o dia?

3. O que você precisa fazer para conseguir pescar camarões?

4. Por quanto tempo pesca com matapi?

5. Você vende alguma coisa? O quê? Quantas vezes? Onde? Por quanto?

6. Viu mudanças nos camarões durante o tempo em que pesca aqui?

7. Para você, o que significa a palavra *serviço*?

8. Em geral o que fazem os homens nesta área/comunidade?

9. Em geral o que fazem as mulheres nesta área/comunidade?

10. O que você acha que são os tipos de serviços mais importantes para a vida aqui?

11. Para você, o que significa a palavra *meio ambiente*?

12. Para você, o que significa a palavra *natureza*?

13. O que a mata e o rio representam/são para a sua vida?

13. De que modo?

14. Durante a sua vida aqui, viu mudanças na mata e no rio? Quais tipos?

15. Durante a sua vida aqui, viu mudanças no que fazem os homens?

16. Durante a sua vida aqui, viu mudanças no que fazem as mulheres?

17. O que você gosta sobre a vida aqui?

18. Tem alguma coisa que não gosta?

19. Você acha que esta comunidade tem problemas? Quais tipos?

20. Você acha que a fábrica da Albras afeta a sua vida aqui?

Appendix 3

Responses

Note: Question 13 should be assumed a yes response as everyone answered positively. In Interview 7 when a husband and wife were interviewed together, it is specified who gave which answer. When --- is inserted, the question was not asked.

Interview 1- male 59 yrs.

1. 14 anos 2. matapi, pescar 3. matapi, babaçu 4.--- 5. açai quando tem pra vender - Barcarena - R\$2,50/raizinha 6. --- 7. --- 8. peixe, camarão 11. --- 12. --- 13. a. mata-carvão rio - camarão 14. não 15. não 16. não 17. --- 18. --- 19. saúde 20. ---

Interview 2 - female 25 yrs.

1. 5 anos 2. cuida casa, comida, lava roupa, serviços na casa 3. --- 4.--- 5. camarão, açai - praia ou Barcarena - R\$1,50-2,00/quilo, 2.50/raz. 6. --- 7. --- 8. matapi, açai 9. serviços na casa 10. matapi, açai 11. --- 12. --- 13. a. sobrevivência produtos - açai camarão 14. não 15. não 16. não 17. --- 18. --- 19. transporte, saúde, falta de recursos, não tem posto de saúde 20. ---

Interview 3 - female 46 yrs.

1. 46 anos 2. muita coisa, casa, trata da roupa, matapi, 3. --- 4. --- 5. camarão - 2-3/sem -Barcarena - R\$1,00-2,00/quilo 6. --- 7. sem resposta 8. maioria pesca, lavoura, variados 9. funcionária pública, matapi, lavoura 10. muitos, professora 11. preservar 12. --- 13. a. peixe, camarão, água, açai, madeira, árvores, folha para camarão 14. muito - caça, desmatamento, reserva de mata 15. não 16. não 17. --- 18. --- 19. fofquinhas, sem-vergonhismos, coisas que desunem, desentendimento entre famílias 20. --

Interview 4 - female 35 yrs.

1.18 yrs. 2. matapi, teço rede, coisa de casa 3. tira tala, prepara tala, compra cipó, forma matapi 4. 16 anos 5. camarão- 2/sem Barcarena -R\$1,00-1,50/quilo 6. --- 7. coisa gente tem que fazer pra se manter, quer ou não quer, todos os dias 8. pesca, quase todos são pescadores 9. alguns/mas funcionários/as, pescadores/as de matapi 10. pesca camarão, pescaria, manejo de açai 11. reserva da floresta, não se deve desmatar, conserva 12.--- 13. com certeza a água, camarão, peixe, mata-tira folha açai 14. extração de madeira 15. não 16. não 17. clima facilidade de conseguir alimentação 18. não 19. falta de união e solidariedade 20. não muito

Interview 5- female 40 yrs.

1. 40 anos 2. levanta cedo, cuida casa, matapi, lava roupa, vou pra colégio com crianças, dia demais curto 3. tala, cipó, plástico, babaçu, forma matapi 4. --- 5. Hermes, camarão, açai- 2/sem, não todo dia - Barcarena - R\$0,80-1,00/quilo (3 fora da safra), R\$1,00-1,50/raza (8 agora) 6. --- 7. obrigação, sinto mal quando não trabalho, compromisso, movimento do corpo, pra sobreviver 8. pesca 9. matapi, cuida

casa, professora 10. pescaria - único serviço, sobreviver 11. não sei 12. --- 13. a. árvore, madeira, tala, rio - serve pra trabalhar terra pra mora, açaí, fruteiras 14. mais fartura - agora difícil, mais movimento, não madeira, não palmito 15. não mais madeira/palmito 16. estudando direitos quer saber outras coisas, quer colaborar com maridos 17. liberdade, clima, não preocupação, tranquilo, não troca pra vida na cidade- peixe fora da água na cidade 18. briga, fofquinhas 19. comunidade significa igreja - não parte 20. fartura não é como era

Interview 6- female 66yrs.

1. 40 anos 2. casa, enche água, faz comida 3. --- 4. --- 5. --- 6. --- 7. coisa boa, trabalhando dinheiro 8. filhos pescam 9. filhas trabalham - Belem, Tailândia Marabá, uma aqui - matapi 10. pescaria 11. não sei como responder 12. --- 13. a. sem resposta 14. tem mudanças 15. não 16. não 17. saúde 18. transporte difícil 19. não 20. ---

Interview 7 - female 40 yrs. male 45 yrs.

1. 17 anos 2. (ela) - trabalho em casa, matapi, paneiro, quintal, filhos (ele) - pesca, rede, matapi 3. --- 4. --- 5. (ele) camarão - 1/sem Barcarena R\$ 1,50-3,00/quilo 6.--- 7. (ele) trabalho - o dia todo 8. (ele) pescam, futebol, diversão 9. (ele) crianças filhos também diversão 10. pesca 11. (ela) pessoal falam em meio-ambiente mais nem explicar (ele) considera - área em que gente vive cuida degradação 12. --- 13a. buscar sustento 14. não 15. desmatamento 16. não 17. todo 18. não 19. saúde, transporte 20. ---

Interview 8 - female 44

1. 5 anos, 20 na área 2. cuida casa, comida, serviçinhos leves 3. --- 4. --- 5. frutas às vezes 6. --- 7. atividade que tem que fazer pra sobreviver, distrair um pouco 8. pesca, roça, açaí 9. ajuda pessoas 10. não sei como responder 11. limpeza, cuida pra onde mora 12. --- 13. a. caça 14. --- 15. não 16. não 17. não agitada, sossegada, encontra natureza 18. não 19. saúde, medicamentos 20. ---

Interview 9 - male 29 yrs.

1. 29 anos 2. matapi, roça, açaizal 3. --- 4. 12 anos 5. camarão, açaí 1-2/sem, 2/sem, Barcarena e Belem, R\$1,00-2,00/quilo 6. não 7. trabalha, alimenta 8. matapi, açaí 9. matapi, açaí 10. camarão, peixe 11. poluição do rio, respeita natureza 12. --- 13. a. lenha prá fogão 14. água cresce mais 15. desmata 16. não 17. puro 18. não 19. não 20. poluição - camarão peixe

Interview 10 - male 68 yrs.

1. toda vida 2. trabalho, açaí, bacaba, carvão, matapi, madeira 3. --- 4. --- 5. açaí, bacaba- Barcarena e Belem 6. peixe e camarões, água poluída 7. trabalho que precisa fazer 8. pesca, matapi e do barco, açaí, necessidade 9. ajuda, matapi, roça, farinha 10. deve ter criação de peixe 11. reserva da natureza 12. de Deus, respeita, cuida 13. mesmo a. carvão, folha cipó 14. fatura bem ouço agora, não mais caça 15. prefeitura Barcarena - melhorando 16. organizando, crianças, família, igreja 17. sossegada, movimento, problema 19. não 20. plantas morrem

Interview 11- male 49 yrs.

1. nasci, criei 2. matapi, pesca 3. tira tala, cipó plástico, babaçu 4. 26 anos 5. camarão, açaí, babaçu 6. não 7. trabalha, dinheiro, sustenta 8. pescaria, muitos 9. pesca matapi, professora 10. pescaria 11. preservar natureza 12. campo ninguém 13. rio-peixe mata-açaí, folha 14. poluição, desmatamento 15. mais escola, mais transporte 16. professora 17. clima, tranqüilidade 18. não 19. não ajuda da prefeitura 20. não – tranqüilo, futuro?

Interview 12- female 26 yrs.

1. nasci, criei 2. serviços de casa 3. --- 4. --- 5. Hermes 6. --- 7. tem muito - tudo dia 8. matapi, açaí 9. matapi, açaí 10. serviços do rio 11. tudo prá gente 12. --- 13. sobrevivência 14. nova plantação 15. nova plantação 16. também 17. todo, rio clima 18. não, carapanã 19. desunida 20. agora não, poluída prá lá, não aqui

Interview 13 - male 45 yrs.

1. 15 anos 2. carpintaria, matapi 3. --- 4. 15 anos 5. camarão, peixe -2/sem - Barcarena 6. não 7. mantém, sobreviver 8. plantio, açaí, peixe, camarão 9. matapi, venda doméstica 10. limpeza, Albras - poluição, safra diminuindo, fumaça, plantação, oferece emprego 11. depende do rio 12. --- 13. sobrevivência 14. diminuindo 15. condição melhorar 16. emprego 17. rio, tudo, temperatura, cidade - quente 18. não 19. sem resposta 20. água, crianças doentes, poço, safra desaparecendo

Interview 14- male 46 yrs.

1. 22 anos 2. matapi, roça 3. fazer matapi 4. 15 anos 5. camarão, açaí -2/sem - Barcarena 2,50-3,00/quilo 6. não 7. dinheiro 8. pescaria 9. casa roça 10. pesca 11. preservar 12. --- 13. pescar, floresta 14. derrubando mata 15. não 16. não 17. todo 18. não 19. entender a gente 20. até agora não - futuro?

Interview 15 - female 75 yrs.

1. nasci, criei 2. netos, matapi, paneiro, galinha 3. --- 4. --- 5. camarão 1/sem 6. nada 7. não sei como responder 8. ajuda 9. roça, matapi, alimento, cuida da casa 10. não sei 11. não sei - educação 12. --- 13. rio - alimento, mata - fruta planta alimenta 14. dava muito - não agora, começo este maio 15. pessoas 16. emprego 17. calma, gostoso, todo 18. não 19. não sei 20. nós - não até agora, ouvi - afeta peixe, camarão

Interview 16- female 59 yrs.

1. 34 anos 2. matapi 3. tira tala, faz matapi 4. desde novinha 5. camarões-1-2/sem-Barcarena 6. não 7. trabalho mesmo tudo 8. filho-pesca 9. filhas - trabalham, estudam 10. matapi 11. não sei - educação 12. --- 13. camarão, roça 14. não 15. pescaria - rede 16. doméstico 17. matapi, praia 18. não 19. não parte da comunidade 20. água - agora precisa carregar água

Interview 17 - male 40 yrs.

1. nasci, criei 2. pesca – rede, matapi 3. --- 4. --- 5. peixe, camarão - Belem, Barcarena 6. graúdo, miúdo 7. trabalho mesmo 8. pesca - bem pouco prefeitura 9. casa roça 10. pesca, açaí 11. conserva

natureza, não pegar peixe pequeno 12. coisas existem muito tempo 13. certo a. serve 14. bastante, água, salgado - não salga mais 15. difícil 16. cuida, casa, matapi, apanha açaí 17. tranqüilidade, diferente da cidade 18. doença 19. recursos 20. peixe, dá muito - não agora, poluição

Interview 18- female 42 yrs.

1. --- 2. trabalho muito - monte de coisas 3. --- 4. --- 5. Avon 6. --- 7. trabalho 8. maioria pesca, estudo 9. casa, roça, estudo, doméstico 10. carteira, peixe 11. restauração de peixe 12. --- 13. lavoura, plantas - serve - camarão 14. estrada, fatura 15. não 16. sim 17. família, danças, cerveja, divertir, trabalhar 18. vizinhos falando 19. barco 20. não afetava

Interview 19 - male 60 yrs.

1. 4 anos 2. trabalho, pesca - rede, matapi 3. --- 4. 18 anos 5. camarão, peixe 6. graúdo, miúdo 7. o que gosta de fazer, trabalhar, saúde 8. pescaria 9. roça 10. pescaria 11. preservar floresta 12. --- 13. a. trabalhar 14. grande da água 15. não 16. não 17. saúde 18. conversa com bêbados 19. não 20. rio - muita diferença na [qualidade da] água

Interview 20 - male 32 yrs.

1. 3 anos 2. roça 3. --- 4. 10 anos 5. camarão, açaí - Barcarena 3/sem. 6. não 7. beneficia a família 8. pescam, plantam, mantém comunidade e família 9. casa, crianças 10. pesca, açaí também 11. significa essa 12. --- 13. transporte, benefício, tem alimento 14. rio - pescadores comerciais descair jogo peixe - fraco 15. não 16. não 17. tranqüilo - vizinhos são boas pessoas 18. não 19. não 20. não sei - pouco tempo aqui

Interview 21 - female 32 yrs.

1. 3 anos 2. várias coisas, trabalhos 3. --- 4. --- 5. açaí, camarão 2-3/mês Barcarena 6. --- 7. gente trabalha 8. muitas profissões 9. dever de casa, saúde 10. não posso responder 11. reserva da natureza 12. Deus faz, homens não fazem 13. sim 14. água salgada - não agora, gente usa poço 15. não 16. não 17. todo 18. não 19. não sei 20 não entendo sobre isso, muitas pessoas falam nisso - peixe, camarão, saúde

Appendix 4 – by E. Morris

Limitations

The researcher understands that an American student cannot have complete understanding of the cultural and lingual patterns and nuances found in an Amazonian ribeirinho community and conversely, that the community may not have complete trust in and understanding for this outside researcher. Therefore, this study has been impacted by the identity of this researcher.

Also, this author recognizes that the experience of all ribeirinhos cannot be essentialized and fully understood through 21 interviews and 10 days living in one community, though patterns were found and ideas were sparked through this work and that of Simonian and further research should be done.

Appendix 5 – by L. T. L. Simonian

With reference to the limitations of the scientific research and discourse, Simonian (2004) published an article that deals in part with similar questions: Women, gender and development in the Brazilian Amazon: prospects for an action oriented anthropology. *Practical Anthropology Review*, Denver, USA, v. 26, n. 3, p. 30-34.

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