

2

Hunting as practiced in the Pedra Branca state park

And God said; Let us make man in our image, after our likeness: and let them have dominion over the fish of the sea, and over the fowl of the air, and over the cattle, and over all the earth, and over every creeping thing that creepeth upon the earth.

-Genesis 1:26 (King James Version)

2.1.

Introduction

The objective of this chapter is to describe to the reader the “who, what, when and how” of hunting in the Pedra Branca Massif. The majority of the discussion includes techniques, motivations and objectives of hunters interviewed during fieldwork. In addition, this information is compared with evidence found in the forest that proves hunting continues to be practiced today. The comparison both illuminates the current situation as well as confirms information provided by the interviewees. This research was initiated to attempt to understand if subsistence hunting may have occurred in the hillsides of Rio de Janeiro by a considerably depressed socio-economic class of citizens in the years surrounding the 1970s. After the first few interviews, it became obvious that hunting in this region has less to do with caloric intake and is more realistically observed as a social activity that involves man-man and man-nature relations which are explored further in chapter three. However, the activity still requires substantial local knowledge. Hunters possessed a familiarity with the forest that many biologists spend considerable time and money attempting to recreate. Yet, as the city grew, the Pedra Branca Park was established, and the forest regenerated, hunting became less tolerated. This does not mean that it disappeared, only became hidden as evidenced by recent discoveries in the forest as well as regular news reports of animal trafficking rings being discovered locally and around the world. This range of societal perceptions produces a range of hunter-types. This chapter discusses these hunter types, their methods, their motivations and their desired prey.

2.2. Subsistence hunting in Rio de Janeiro

Just as human occupation has taken many forms in the coastal plains and massifs of Rio de Janeiro, hunting in the region has also varied in technique and motivation. In terms of motivation, past hunters could be grouped loosely into various forms of subsistence hunters and poachers. Each hunter type interacted with the local ecosystem and the landscape to varying degrees, some interactions resulted in conservation of resources while others decimated populations to the point of species extinction.

The subsistence hunter dates back to indigenous hunter-gatherers and can still be found today in Brazil in varying forms. For example, in indigenous tribes, groups of displaced persons, such as landless *Quilombos*¹, and in other small rural family farms where the land provides some form of dietary protein and even meets certain cultural requirements. Indeed, according to Candido (1971), many small poorer communities in rural areas of the states of Rio de Janeiro and São Paulo rely on the sea - harvesting fish and mollusks, animal husbandry, and of course beans for the majority of their protein intake. Without animal husbandry or access to the sea, subsistence hunting often meant a non-sedentary life style. Yet for these groups, hunting was and still is a means to reduce the pressures placed on domestic livestock such as poultry and pork, especially useful to the small-scale farmer, or to compliment fishing during rainy seasons or when winds made the sea too dangerous to fish (Hanazaki et al., 2009). Indeed, during interviews, it was discovered that *carne seca* (cured meat) and animal husbandry were able to provide much of a diet's necessary protein. However, hunting added variety and fresh meat while reducing pressures on domestic livestock. Additionally, one resident, who partially subsisted through small-scale farming, described conditions prior to household refrigeration stating that one day per week would be spent hunting to help prolong their modest livestock population. As their farm plot required enormous effort, this was the maximum amount of time that could be spent on the activity. This was the closest that our research was able to arrive in our search for a *dietary* hunting subsistence in the Pedra Branca Massif. However, the

¹ Rural black communities, often considered descendents of African slaves (Linhares, 2004)

desire for fresh meat provided the first evidence from the interviews that hunting is indeed a human endeavor for more than just food. It is also an activity that fulfills a culturally influenced need for more than simple survival.

Therefore, in this author's opinion, subsistence hunting for mere caloric intake did not occur in the Pedra Branca Massif in the second half of the 20th century. In addition, while located relatively close to the littoral region, fishing was not a regular occupation or means of subsistence by any of the hunters interviewed. Perhaps the distance between the massif and the sea was greater than the potential benefits or the time available among other subsistence or wage-related tasks? Although, perhaps, this is a telling fact: These hunters still hunted despite the ability to obtain sufficient dietary necessities in the marketplace. They still hunted despite their professions, devoted to constructing the expanding city or feeding it, absorbing the majority of their time. The underlying motivation of these hunters becomes a greater interest and will be explored in chapter three.

Additionally, subsistence hunting and gathering for dietary purposes is only capable of supporting relatively smaller human populations in accordance with the second law of thermodynamics, which states, according to Simmons (1966), that there is a loss of energy between trophic levels in ecological food chains. In fact, table 1 taken from Simmons (1966) demonstrates how little initial solar energy converted through photosynthesis remains for top level carnivores.

Total incident light	3000 kcal/day	1st trophic level- producer organism stage
Absorbed light	1500 kcal/day	
Available energy for herbivore	15 kcal/day	2nd trophic level- (1st consumer organism)
Available for carnivore after herbivore metabolism	1.5 kcal/day	2nd trophic level- (1st consumer organism)
Available for 'top carnivore'	0.15 kcal/day	4th trophic level- (3rd consumer organism)

Table 1: Example energetic exchange showing losses between trophic levels (Simmons 1966)

Simmons (1966) goes on to state that

If the actual transformation of energy in this system were through the chain mice-snakes-hawks, then of the original 3000 kcal of energy incident upon the grass only 0.15 kcal would be available to the hawk. Again, since man is very often in the position of a top carnivore, it is apparent that he uses only a very small proportion of the energy incident upon the earth (Simmons 1966, p.60).

In an urban forest, surrounded by a growing metropolis, this simplified example provides some clarity to the difficulty any society would find in relying on hunting to provide the majority of its dietary subsistence. This is especially true in the city of Rio de Janeiro given the relatively small territory confined by the PEPB in relation to the number of hunters that might participate if there were no control mechanisms regulating or prohibiting hunting. In fact, it has been argued that hunting alone has never been able to sustain a society for any prolonged period of time. For example, Bailey et al. (1989, p.72) were “unable to find any unambiguous ethnographic account of people living in tropical forest without some reliance on domesticated plants and animals”. This is especially true due to the reduction of game habitat which has reduced the available prey. Environmental engineering can produce wheat, corn and rice at, apparently, increasingly more efficient rates. Of course the efficiency of modern agriculture comes at a cost of intensive use of petroleum-based energy conversion. On the contrary, meat consumption from hunting is based in a solar energy conversion system and therefore carries only an accompanying territorial cost. However, game management requires a delicate balance disturbed most by destruction, fragmentation, and isolation of forest habitat and, of course, excessive hunting pressure. Poor execution may have drastic and lasting effects on diversity and is discussed in chapter four.

2.3.

Riches of the poor

While it appears that subsistence hunting in the tropical forests of the Pedra Branca Massif could not have been a sole source of dietary needs for a sustained amount of time, it should be noted that protein is not the only product of hunting. As globalization continues to connect the far corners of the world and refrigeration meets the Amazonian waterways, subsistence hunting has become a commercial activity for those people living in poverty supplying families with purchasing power instead of putting meat directly on the table (Puig 2008). Oliveira (2006) describes how human territorialization relates to this type of commercialization stating,

The history of human activity within an ecosystem can be approached from different angles, and at different time and spatial scales. However, studies on this theme must all take into account the fact that forests (considered here as part of the geographical space of those cultures) are perceived as territories – occupied spaces appropriated by the cultures that utilize them (or utilized them at earlier

times). It is the quest for survival that constitutes the driving force for this appropriation, identification, and transformation of forested areas. Territories are the “riches of the poor”, and represent potential access to spaces otherwise denied by the surrounding societies (Oliveira 2006, p.179).

In many instances the hunters who have territorialized a section of forest are often most knowledgeable regarding forest resources and animal behaviors. One hunter interviewed described a deceased hunting friend’s ability to detect the presence of animals through smell. In addition, hunters detailed many animal behaviors including their favorite game’s food preferences and the animal’s most active times of day or night. For example, they knew that a specific bait station, used in a hunting technique described in the next section, would first be visited by opossums (*Didelphis marsupialis*). Yet, the hunter’s objective was often the paca (*Cuniculus paca*) which, according to one of the hunters interviewed, arrives well after the opossum. Giving away the hunter’s position to confirm the presence of a paca would likely spoil the hunting for the night. Therefore, the hunter had to rely on this awareness of specific animal behaviors to avoid detection until the hunter was sure that the correct game was present.

Additional information about animal behavior included the understanding of prey reproduction cycles and the implications involved in killing a pregnant or nursing female. Such knowledge lends credibility to the idea that there are potential conservation strategies in this human activity. In fact, there is ample evidence of historical checks and balances between humans and the natural world, such as the many Amazonian cosmologies discussed by Silva et al. (2005).¹ The most obvious restriction promoting conservation is the establishment of self-imposed hunting seasons that avoided the reproductive periods of game. Often, these restrictions are described in conjunction with harvest or planting dates and they help to promote healthy animal populations. However, Smith and Wishnie (2000, p.501) argue that “factors such as low human population density, low demand for a resource, or limited technology can be expected to contribute to many instances of sustainability, with any conservation being an incidental byproduct”. In other words, many populations would switch to the most abundant game whenever the

¹ Also see Bailey (1989), Layton (1991) & Neto (2009) for examples of conservation efforts of peasant or indigenous societies.

effort or more specifically, caloric costs, of acquiring a preferred game became too high without conscious regard to conservation.

As the 1970's approached, many subsistence hunters in Brasil, for example the Guarani Indians, began hunting only for medicinal purposes due to greater availability of meat and other consumer goods in the market and the shrinking of suitable habitats (in fact, the Atlantic Coastal Forest is around 7 percent of its original mass due to human activities like settlement, agriculture and cattle raising) (INEA, 2011). The reduction in game due to habitat loss and the still high acquisition cost of modern medicines made subsistence hunting for medicinal purposes still a viable activity (Alves, 2010) while adding additional evidence to the inability of hunting to provide for the dietary needs of multiple families.

Besides the know-how to produce leather goods, tools from bone and other products, many non-indigenous hunters also have a wealth of knowledge of traditional medicines available from specific animals (Alves, 2010). For example, the 74 year old carpenter-hunter interviewed during fieldwork detailed a home remedy for bronchitis using the needles from hedgehogs. The needles (which according to the hunter's wife continue to grow and divide within the jar) are ground into a powder, mixed into a drink and finally given to an ailing person. Figure 6 is a photograph of this hunter's supply of needles for his home remedy and figure 7 is a photograph taken during fieldwork in the PEPB in April of 2010 of this species of hedgehog.



Figure 6 (left): Needles from a hedgehog

Figure 7 (right): Hedgehog discovered in the PEPB during fieldwork

Finally, regardless of technique, hunting is time consuming. This is an additional reason that, with greater availability of meat and poultry in markets, even dietary subsistence hunting in the Pedra Branca Massif has declined. Moran (1981, p.17) argues that urbanization and capitalism induces a transition from a subsistence lifestyle to greater dependence on the capitalist economic structure and therefore a necessity to enter into the wage economy. As the West Zone of Rio de Janeiro grew, most of the hunters interviewed sought wage earning professions, whether helping to expand the city or to serve it. Unfortunately, other types of hunters have continued to exert pressures on available resources.

2.4. Operating outside of the law

As discussed, the natural and non-natural landscapes of Rio de Janeiro are thoroughly interwoven, encroaching upon faunal habitat. Therefore, hunting to meet nutritional necessities in this fragmented landscape is nearly impossible due to a large hunter population placing too much pressure on faunal resources within a space-limited territory. It should be understood that hunting is illegal in forests located within the metropolitan area of Rio de Janeiro. It has been possible to legally hunt in many regions in Brazil and there are clauses allowing hunting in Rio de Janeiro, stating that the satiation of hunger of the people or of family would not be criminally punished (Law (*lei*) 9.605, 1998). Yet, in the Pedra Branca Massif there were, and still are, weekend hunters who hunted outside of the law; local residents who live near the forest and who, through the years, have developed a vast knowledge of forest activity while hunting and trapping for personal use. The fact that hunting is illegal may lead many to label anyone hunting as “poachers” defined as “one who trespasses or steals” or “kills or takes wild animals (as game or fish) illegally” (Merriam-Webster, 2011). Where there are strict regulations governing hunting, this definition would expand including those hunters not in accordance with said regulations. However, in this research, we will limit this definition to those selling animals or animal products for profit to delineate from the now-elderly hunters whose legality was debatable and whose motivations will be explored in chapter three.

To quickly discuss poachers and traffickers of animals and animal parts; there are ample news reports and Global non-governmental agencies detailing the

activities of poachers who harvest for profit, whether it be to supply an informal restaurant with exotic meats or for selling feathers, hides or live animals in robust black markets. Selling animal parts, such as exotic feathers for ladies' hats, dates back centuries to colonial periods. Within Brazil, religious rituals still cause a high demand for animal products. Alves and Rosa (2010) comment on the forces driving illegal markets, specifically faulting the demand side of the equation, similarly to the current debate on narcotics trafficking;

Driving the trade is the end-consumer, who is either unaware or chooses to ignore the fact that the trade in wild animals is illegal in Brazil, and fails to perceive their financial incentives as potentially undermining efforts to conserve faunal resources and habitats in the country. Likewise, knowledge of the endangered status of some species by traders does not prevent their commercialization. Rather, the endangered status of a particular species is often used by traders as a criterion to increase its monetary value (Alves & Rosa, 2010, p.11).

In this manner, the poacher is doubly taxing on state resources. First, the majority of these hunters hunt on public land or trespasses on private land. Therefore the hunters have little ability to control the resources through territorialization and so they have little motivation to practice conservation. In fact, to maximize profits, the goal of this hunter is to take as much game as possible in as short a time period as possible. The poacher acts without regard to population health, reproductive seasons, or other conservation measures. Accomplishing this "harvest all at once" goal became easier with the introduction of accessible refrigeration during the second half of the 20th century in Brazil. One hunter confirmed knowing of a hunter who had over twenty opossums in his freezer and would sell them to a local restaurant when the market was to his advantage. Secondly, these poachers force the state to choose whether to divert state funding towards defending these resources through conservation and policing agencies or to allow the existing activity to continue unabated.

2.5. Hunters in the Pedra Branca Massif

For many past hunters, according to interviews, there exists a desire for strong conservation efforts to manage valuable resources; resources valuable both to society and to the hunter. In return, an equally valuable information source is sustained through the intimate hunter-nature relationship. Now, many argue that other outdoor activities, such as hiking, provide similar opportunities for communing with nature (Peterson 2004). However, through interviews, particular hunter

knowledge of unique animal behaviors was discovered. For example, the knowledge possessed by these individuals regularly involved game inventories, knowledge of local dens and game trails, game indicators such as favorite foods, and even the specific smells of certain animals. The wisdom possessed by this aged group of hunters should not be discarded, but instead valued and seen for its potential to shed light on complex ecosystem interactions as well as spatial arrangements in the fabric of society.

Within this group of hunters, there are multiple techniques and motivations. Often, the hunters developed identity and friendships through their activity. It is believed that interviews revealed a link between hunting and the ability to create a social identity which allowed a man to distinguish himself in a culturally significant way. Many hunters simply enjoyed the activity, for example, in the sub-category of hunting with dogs, interviewees discussed the beauty of watching a good dog work and how the dogs were a favorite topic of discussion during the week or at the bar. With numerous hunter profiles discovered, somewhat defined by economic status, hunting technique, and motivation, it is clear that hunting has and continues to occur in the forests surrounding Rio de Janeiro.

2.6. Territorialization

When many people imagine hunting, three main elements come to mind: The hunter (usually male), the prey (normally a four-legged mammal), and a weapon (usually a shotgun, rifle or bow and arrow). Of course, hunting, like many human activities, is beyond such simplification. Besides the three elements listed, prey preferences, taboos, specialized equipment (traps and nets), dogs (utilized in various forms) and hunting parties are additional elements that are critical to a better understanding hunting (Chitwood et al., 2011). In addition, techniques vary and they include careful observation of beasts and habitats and the territorialization of areas to be hunted.

Establishing a territory begins with a deep understanding of forest resources. Evidence of this is seen in how hunters would name specific animal dens which allowed accurate game inventories and thus more effective management. In fact, one hunter still remembered some of the names he and his friends had given to dens: Mariana, Santana and Maria. Naming dens also allowed a specialized

type of communication unique to hunters. In addition, many of the interviewees who hunted on public lands, specifically the area now known as the Pedra Branca State Park discussed unwritten codes of behavior among hunters. For example, if a hunter arrived in an occupied location, he would continue on to an alternate site leaving the first hunter in place. As the majority of these hunters were neighbors, they would at times hunt in pairs, especially at night. In addition, these men would often share their stories in the local bar, again utilizing the given names of the dens to identify place and status of the game population, yet just as likely using their “code” to exclude outsiders from the conversation.

The ability to participate in the sharing of stories appeared to be one form of entry into the activity for outsiders who already possessed experience. Other novice hunters discovered the activity through kinship whether it be a father, grandfather or uncle that made the introduction and provided the instruction on animal behavior, hunting techniques and proper etiquette. An experienced hunter could teach those new to the sport and those whom he felt worthy and capable, about the best times to hunt and more importantly, conservation measures to help sustain local game populations.

For landowners¹, it would seem that establishing territories for hunting would be straightforward. However, as territories increase, the cost of controlling these territories increases. Control measures range from simple property markers, signs and fences to more advance technologies such as remote observation. Regardless of the method of control, it is still advantageous for the landowner to develop an intimate relationship with the territory in order to perceive when external forces are affecting it.

2.7. Hunting techniques in the PEPB

In addition to territorialization methods, interviews revealed numerous different hunting techniques. These techniques demonstrate a range of complexity and human innovation. The techniques present themselves across a spectrum of socio-economic factors that include poverty, land ownership and the illegality of

¹ It should be noted that only one interviewee owned substantial private property providing a small sample size.

the activity. The techniques listed below, discovered through oral histories of Pedra Branca Massif hunters, have been useful in revealing hunter motivations and in understanding the relationship between hunter, society and nature.

Six hunting techniques described by Pedra Branca Massif Hunters:

1. Shots of opportunity: The majority of hunters interviewed hunted with a shotgun or a rifle. Some of the hunters would take shots of opportunities while working in the forest. For example, one hunter interviewed stated that his father produced charcoal to sell to the expanding city. He would go into the forest for a few days to clear a stand of trees, pile them and then construct a make-shift oven to produce charcoal *in situ*. When he spotted game while working, this hunter would take advantage of the opportunity to have fresh meat; killing, cleaning and preparing the game alongside his *balão de carvão* as can be seen in figure 8.



Figure 8: Balão de carvão (charcoal oven) (Corrêa, 1936)

2. Stationary or stand hunting: Other hunters, especially hunters after a specific animal, such as paca, would spend a considerable amount of time scouting the territory. They would look for signs of trails and tracks from the paca and then construct or find a suitable hunting stand. They would bait this stand for a few weeks, making sure that game was appearing. Then one or two hunters would spend the night in the stand. The hunt was described in detail again showing the intimate connection with the landscape that these hunters possessed. First, they would sit in darkness and listen, the first sound they heard would always be opossums and they

would ignore them. After a few hours, the next sound would be the desired paca and one of the hunters would illuminate the target with a spotlight while the other took a shot with a shotgun or rifle. Figure 9 shows this type of hunting stand found during fieldwork and taken from the beast's point of view.



Figure 9: Hunting platform and bait

- 3. Trapping:** Another common technique discussed was trapping. The majority of hunters we spoke with declared that they had no desire to trap as the activity does not often allow for selectivity. However, there were exceptions as one hunter described a tee-pee type trap constructed over an armadillo den. According to the hunter, the anatomy of the armadillo is such that upon exiting the hole, the animal is stuck in the trap and unable to reverse out of it. While conducting fieldwork, two different trapping sites were discovered where a large flat rock was propped up with a stick that had a string tied to bait sitting under the rock as shown in figure 10. This style of trap is simple enough to have been used for thousands of years,

making it an inexpensive choice for anyone living in poverty. The trap uses crushing force to kill prey instantly. However, it is far from reliable in this regard, often resulting in only crushing injuries to prey allowing them to escape and leaving them to suffer.

None of the sites found were baited. This fact highlights another problematic aspect of trapping. However, in addition to the low cost of construction, the ability to “set it and forget it” is an advantage of trapping. Yet, the problems of trapping in a purely conservation mindset or even in a subsistence frame of mind multiply quickly as the activity is not selective; meaning that male, female or young underdeveloped offspring can be caught in the trap. Similarly, an undesired animal can be trapped or another predator or scavenger can intercept the caught prey if the trap is not checked regularly. In addition, trapping can be dangerous to game, domestic animals and pets and even to other humans when traps that kill or maim are used. The trap presented in figures 10 and 11 are far from reliable with reports of permanently maiming prey instead of killing it and the capture of household pets.



Figure 10 (left): Seemingly prehistoric traps found in the PEPB

Figure 11 (right): A banana baited trap

4. The *toco*: A very dangerous system discussed in many of the interviews was the *toco*. The device is basically an improvised explosive device (IED) similar to those used in Afghanistan and Iraq. A metal pipe is fitted with a shotgun or rifle cartridge. Then a striker device, like a traditional spring-action mousetrap, is attached to the pipe as seen in figures 12 and 13. Tripwires are attached to the spring arms of the mousetraps, the weapons are placed along fresh animal trails and then the mousetraps are set.

Hunters line animal trails with one or more of these metal tubes and when any animal or domestic pet or person walks this trail, the tubes fire indiscriminately. In fact, interviewees reported knowledge of 50 or more *tocos* being used in one trail. Many of these are lost or forgotten, leaving the “booby-traps” for unsuspecting victims. The hunters interviewed recalled an accident where one hunter was shot in the leg and multiple occurrences where dogs were lost to these forgotten IEDs. Redford (1992, p.416) discusses the problems associated with this indiscriminate killing of animals stating that for every desired animal taken, up to 3 additional animals die; a process that clearly transforms the landscape to be discussed further in chapter four.



Figure 12 (left): *Toco* (www.reduto.net, 2011)

Figure 13 (right): A *toco* stand found in the Pedra Branca Massif

5. The net as a trap: A trapping method often used in conjunction with the use of dogs was to place nets inside known dens and then allow dogs to drive animals such as the paca towards the netted dens. During fieldwork, in various valleys within the PEPB, five discarded nets were found far from both trails and water bodies. The nets were found in various levels of decay providing no clear timeline as to when they were used. However, there were nets still in good condition and their locations make utilization as part of a hunting system very likely. This information was corroborated with discussions about hunting techniques between two different hunters who described this dog and net technique. In addition, during fieldwork one Sunday morning, two men were observed with approximately eight dogs exiting the PEPB just after sunrise, again providing credibility to the stories told to us by our interviewees that hunting still takes place in the

PEPB. Indeed, interviewees reported that they believed all forms of hunting to still be practiced in the PEPB, which was confirmed by the evidence of hunting platforms and traps found during fieldwork. One of the hunters interviewed is shown in figure 14 displaying a similar type of net utilized in hunting and trapping.



Figure 14: Hunter displaying a hunting net.

6. Hunting with dogs: Dogs have been used for a variety of tasks for over 10,000 years, to include hunting (Miklosi, 2007). In the news most recently, and quite controversially, hunting for foxes with dogs has been common in the United Kingdom. In rural Southern United States, dogs hunt white-tailed deer and black bears (Chitwood et. al., 2011). In the past and today, hunting with dogs in Brazil appears to be a popular pastime. Through interviews it was discovered that the current value of a high quality hunting dog is between 4.000 and 5.000 Brazilian Reals and another hunter revealed that, in the 1970s, a hunter traded a valuable horse for a top hunting dog. The hunter described a top-quality hunting dog as one that hunts a specific animal as opposed to simply hunting for any animal. The dog this hunter traded for was uniquely suited to hunting paca. Nearly every person interviewed lauded the paca as the best wild meat available in the Pedra Branca Massif and the prized catch of any hunter. In addition, dogs are especially useful in difficult terrain where a human has difficulty

traversing and the PEPB has its share of thick undergrowth. During fieldwork there were numerous requirements for a machete to open dormant trails. A good dog, or team of dogs, can manage thick terrain with greater ease and funnel prey towards the hunter(s).

The list of hunting techniques provided is certainly not absolute. These techniques were discussed by interviewees and found to be somewhat unique and therefore passed on to the reader. Certainly, more contemporary techniques have also been employed. In addition, fieldwork and interviews discovered fascinating combinations of the techniques above. For example, one man in his 60's told a story of being in a boat, traveling along the coast when he spotted a deer that had slid down an embankment and was trapped between the sea, the embankment and the dog that had chased it there. The man had his rifle with him, clearly always a hunter and ready for shots of opportunity, and killed the deer. The hunter then shared part of his fortune with his neighbor who owned the dog that had done the dirty work. The relationships built through events like this are the basis for social and self identity construction discussed in chapter three.

2.8.

Game hunted in the Pedra Branca Massif

To complete the picture of *who* hunts *what*, *where*, and *how* (leaving the *why* for chapter three), it is necessary to describe the animals that our hunters discussed, both their favorites and those they would avoid, before closing this chapter. Hunter preferences varied throughout the interviews. As stated, the paca (figure 15) was a favorite game for nearly all of them. In fact, one woman interviewed discussed how her husband would often hunt for a paca when there was a wedding in the family or neighborhood. She said that the paca was such a delicacy that it would be served *after* the wedding cake. Providing such a prize to community and family allowed the hunter to gain prestige through both his charity and his expertise as a hunter and provider. In addition, it allowed his family to share in the prestige as, for example, his wife could show her skill in preparing and serving the dish. Dantas (2004) describes thoroughly how food selection, the preparation of food, and most importantly the sharing of food creates bonds within a society through festivals and the exchange of gifts;

A cozinha é então o local por excelência de produção de valores alimentares e da transformação de simples "pratos" em comidas dádivas com forte poder de

circulação no *mercado dos bens simbólicos*. Além de ser um espaço atrativo onde são estabelecidas relações sociais e afetividades é nela que se desenvolvem técnicas e saberes que são responsáveis pela transformação de alimentos crus em alimentos cozidos. [Translation... “Therefore, the kitchen is an excellent place for the production of dining values and the transformation of simple dishes into gifted meals with strong circulation power within a *symbolic goods marketplace*. Besides being an attractive place social relations and affections are established, it is where the techniques and knowledge are developed for transforming raw food into cooked.”]¹ (Dantas, 2004, p. 7).

It should be recognized that the paca was the favorite game within a very fragmented landscape, limiting the selection for its residents. According to Redford and Robinson (1987), whose text deals with game preference comparisons between colonists and indigenous populations in neotropical forests, variability falls to two sources; biological and cultural. Biologically, game available and species densities are determined by interrelated “geographic, ecological, and historical factors” (Redford & Robinson 1987, p.660). The authors describe hunting techniques, taboos, habitat alteration (in terms of destruction or improvement) and hunting regulations as cultural factors. Redford and Robinson (1987) stress that these factors are interrelated. For example, hunting technique and regulations will directly affect species density. The results of our interviews showed more limited palates for the majority of our hunters and their families. The possible causes for the urban hunter’s preferences may include the factors described by Redford and Robinson (1987), yet these strong inclinations for one animal over others provide evidence that those interviewed focused more on the activity and its cultural benefits than on providing dietary needs more easily met at the supermarket.

In addition to the paca, which was often served roasted whole, certain birds were popular. The jacupemba (figure 16, *Penelope obscura*), commonly referred to as jacú, is a representative example and is similar in size and behavior to the pheasant, a popular game-bird in Europe and the United States. Also, reptiles of varying size were hunted. Lizards are abundant, especially in summer, and easy to catch according to interviewees. Snakes were eaten on occasion, however there seemed to exist many doubts as to which snake could safely be eaten. Due to the fear of poisoning, many hunters avoided eating snakes, although they still killed them. Other popular mammals hunted regularly included the armadillo

¹ Translated by author.

(figure 17) and the opossum (figure 18). There were mixed reports of hunting for the various types of monkeys, the anteater, the capybara, and the hedgehog. Many of these individual restrictions on hunting preferences are often labeled taboos. Redford and Robinson (1987) discuss taboos and note that they are inconsistent depending on location and local cultures. In a forest located within the city municipality, taboos against killing monkeys for meat can be easily imagined. One hunter interviewed did mention the killing of a howler monkey long ago by one of his hunting partners. He stated that his friend had felt remorseful and did not hunt another monkey after that. However, it should not be forgotten that our cultural landscape changes over time. This story may have changed along the years as society's view of primates and hunting changed. The idea of landscape's ability to influence hunters and hunting practices is discussed in chapter four. Anteaters were mentioned by some as being hunted, however the majority of the interviewees stated that they had never seen one in the massif. The hedgehog was reported to be difficult to clean due to needles and yielded little meat. Finally, many hunters stated that the meat of capybaras is greasy or oily and that they did not like the flavor, however many hunters treated the capybara as a pest, killing them to curb its population size, at times with the idea of allowing paca populations to thrive.



Figure 15: Paca (Courtesy of hunter interviewed, year unknown).

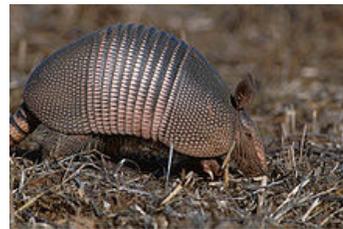


Figure 16 (left): Jacupemba

Figure 17 (top right): Armadillo (Google images, 2011)

Figure 18 (bottom right): Opossum (Google images, 2011)

Presented in the previous chapter was a portrayal of who has hunted in the Pedra Branca Massif in the decades surrounding the 1970s. It also explored various techniques as well as some of the fauna hunted during that time period. The location of this “natural” landscape within Metropolitan Rio de Janeiro makes this an ideal setting to understand the many forms that the transition from rural to urban takes; whether that be the long time resident watching as the city encroaches upon his or her territory, the immigrant (Brazilian or foreign) from far off rural regions clinging to patrimonial heritage, or the city itself as it imagines potentialities of this space. Now that the reader has been thoroughly introduced to the sub-

ject, chapter three will discuss the social, cultural and economic factors that surround these hunters. Hunting will be shown as a means for these men and women to cope with the socio-economic environment they find themselves in as well as establish a culturally acceptable identity that provided self worth, prestige and status among family and neighbors.