

Ibiti

35 YEARS

RESERVA DO IBITIPOCA MAGAZINE



CRUDE AWAKENING

Reverence to nature as an artistic manifesto

SUSTAINABILITY

Entrepreneurship and social empowerment

ENVIRONMENT

Betting on community education

MURIQUI-DO-NORTE

The rescue of an emblematic species

*Let ours be a time
remembered for the
awakening of a new
reverence for life, the
firm resolve to achieve
sustainability, the
quickenning of the struggle
for justice and peace, and
the joyful celebration of life.*

The Earth Charter



THE DREAM AND THE WORK OF MANY

It has been 35 years since our cousin, Carlinhos, “planted the first seed” buying a small farm that is today the heart of Reserva do Ibitipoca. The coziness of Minas Gerais’ people and their tales, the singing of the waters and the thunderstorms; the forest’s life, the magic dusk, the starlight, the magnificence of the moon, the night’s mysteries, the uncountable hidden water falls; the mountains’ endless beauties and, above all, the people we found and met along the way who have fed our souls with the purest joy of existence. At this pace, we were involved in a virtuous cycle in which the will to do something bigger was instigated as well as satiated, giving sense to an evolutionary fate that is intrinsic in all of us.

We have learned, in our insignificance, how generous, rich, magnanimous Mother Nature is. Each year we realize the singularity and the dynamics of life: an eternity, the blooming of a flower, the twinkling of an eye, everything has its time...

Centuries of greed and hard labor for human survival have left deep marks in the mountains and its surroundings. Extracting livelihood from the land and the woods, in an everyday battle with no truce, has left old and profound wounds and scars, which contrast with such an enormous beauty of untouched spots, true works of art.

Nature’s resilience, even though exemplarily brave, was showing signs of fatigue. The clamor for help was apparent and is still latent. There is much to do and this is just the beginning of a long journey that we carry on, step by step.

That which has been done so far is extremely rewarding. Along the years, we have seen the pasture turn into forest again; the animals come back to their original habitats and the people of the land encounter their lost livelihood. Here, we know that each of our acts affects not only us but nature and others as well. We are intrinsically interdependent.

Given the overall simple convergence of ideas and goals, we turned this mineira land into a cosmopolitan one: receiving volunteers,

researchers and guests from the whole planet. As a counterpoint to the art of Mother Nature, we also gave space to the art of the ‘human animal’, in a pleasant and spirited game that enchants the soul, illuminates the eyes and fulfills the heart. Then, like Mumbatu, the sculpture that covers this magazine and represents the delicate balance between nature and humanity, we bow down, gratefully, in reverence to the grandeur of nature and to all the little nuances in life.

We are still in the very beginning of this long journey that will already span far beyond our existence, but we dare to feed new dreams and to envision new insights that will serve us as a guide and an inspiration for another 35 years ahead of us...

Where are we going? What do we envision? Which future do we want? How to interact with the dreams of so many and make them sustainable?

Questions require answers, prompt searches, nurture dreams, which, in turn, define paths and choices... We envision an inspiring project over the next 35 years: an ecological sanctuary in full regeneration, with several species reintroduced in the area, including the gavião-real, a hawk that was once a symbol of our skies; a big space where entrepreneur truly sustainable activities proliferate and prosper; and a place where human beings, in all their multiplicity, imperfections and beauty may find, humbly and holistically, their call.

We see a place filled with happy, healthy and fraternal people having fun, working, teaching, learning and prospering in peace and harmony with nature. A place where the highest technology, modernness and the world are connected with simplicity, culture, traditions and local wisdom. A place where noble values and purpose serve as a guide, intrinsically present in all daily activities. It is our hope that this dream will be carried on for many generations to come.

*With affection and gratitude,
Renato and Marcelo Machado*



OUR MISSION

Improve the conditions that will enable the people in the region to feel happy

VISION
An inspiring social environmental project, ready to be replicated by 2022

VALUES
Kindness
Simplicity
Enthusiasm
Excellence
Spirituality
Union





Jabuticabas, oniric painting by Australian artist Christian Spencer, produced when visited Reserva do Ibitipoca (2017, acrylic on canvas, 70 cm X 100 cm)



Raquel and Jean, partners in writing and art, celebrate the 35th anniversary of Reserva do Ibitipoca

THIRST FOR GREEN :: Raquel Ribeiro

One needs at least two lenses to really see the Reserva do Ibitipoca: one for the macro view of it and another for the micro one. There is grandeur in each waterfall, 100-year-old tree, cave and landscape; and even more in the courageous sustainability project that permeates all the actions here. There is beauty and poetry in the wild flowers, in the minuscule golden-drop frog, in the sunlight that passes through the colored stained glasses and in the simple details of handcrafted decorations in the houses.

Just like matrioska, the Russian doll which is "pregnant" with other dolls that become smaller and smaller, every time we go to this revitalized area of Minas Gerais we have new surprises. Mistreated by the gold fever and stripped bare by cattle ranching, today the land has regained the status of Mata Atlântica (the Atlantic Forest). From the almost fluorescent grass to the darker leaves of some trees, endless green tones color the diversity of a biome that in the past covered most of the Brazilian territory.

A certain 'thirst for green' was maybe the sparkle that gave life

to the environmental project at the Reserva back in 1981. But the result does not restrict itself to the green area's enlargement and the newly grown flora and fauna: the Reserva was able to keep the local people on the land! Corn and bean are seeded; manioc, juçara, banana and avocado are planted, just like cooperation, dream and happiness are constantly cultivated.

The art piece on our cover translates this spirit. Mumbatu, an iron welded sculpture high is 5 meters high and weighs 12 tons, actually feels small, despite its dimensions, as it stands in front of the magnificence of the natural landscape. Inspired by African religions, the figure looks attentively to the soil. Its hand seems to want to show it is changing planting into praying. Like his six companions, created by the artist Karen Cusolito, Mumbatu is made from industrial scrap metal. It is good to imagine that all this iron could have been extracted from this own Brazilian soil, forged in distant, foreign places, and returned now to take roots in its native land, giving way to a message of harmony and hope.



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A THOUSAND GREENS

One of the missions of the Reserva is to protect the ecosystems of Ibitipoca's region. Environmental education and the community involvement are some of the tools for reaching this goal

Created in 1981 with the acquisition of *Fazenda do Engenho*, an estate farm in the town of Lima Duarte, in Minas Gerais state, the Reserva do Ibitipoca has purchased and incorporated a hundred properties, which currently accounts for over 4,000 hectares of conservation area. This represents a natural network also capable to protect the state park, *Parque Estadual do Ibitipoca* (PEIb), an important ecosystem with a total area of about 1,500 ha. The Reserva follows closely one of the goals of the Agenda 21: "Adopting sustainability to change the directions of the global economic growth that is predatory to the environment and socially exclusive; thinking globally and acting locally". In 35 years of existence, the soil has been through big changes. Before, there

was 10% of forest and 90% of dull pasture. Now, uncountable tones of green permeate practically all the area and the goal is to cover 99% of the land with native vegetation and use only 1% for food production. The Reserva, the state park and all the Serra do Ibitipoca, are composed of a mosaic of Atlantic Forest vegetation, where rupestrine fields and a dense ombrophyllous forest prevail. This is defined as an ecotone (from the Greek oikos, house, and tonos, tension), where two major ecological communities interact, providing rich biodiversity: *candeias*, a Brazilian native tree, cactus, evergreens, *canelas-de-emas*, a typical plant from the *cerrado* (the Brazilian savanna), lichens and a profusion of bromeliads. Narjara Lopes de Abreu, a biologist representing the

company Flora Original, from Juiz de Fora, a city in Minas Gerais state, coordinated a team in charge of diagnosing the conservation status of the Reserva's six most significant forest areas. "The region is privileged because it brings together two biomas that present great diversity." The conclusion of this study indicates an advanced regeneration status for the six areas: Luna, Mono, Gavião, Patuá, Boa Vista and Janela do Céu (Heaven's Window). Besides, considering the size of the areas and the degree of conservation of each, the Reserva already has a basis to reach their environmental goal: to be a refuge of wild life. The biologist identified many samples of flora threatened with extinction—in particular epiphyte plants,

like bromeliads and orchids. Recoverng forests in an area that not long ago was used for cattle raising, facilitates the increase of the population of many animal species. There is protection against hunters, possibilities of genetic exchanges and a larger food supply. It is possible to observe the return of endemic species threatened with extinction like the ocelot and the manned wolf. Other species, like the muriqui-do-norte, still require special attention. There are only 12 populations of these monkeys in the world and one of them is in the Reserva! "The muriquis that live at Mata do Luna represent an important genetic lineage, because it is the southernmost population of its kind within the geographical distribution of this

SEE THE VIDEO



Passionate for the muriquis and Mata da Luna, Brittany Berger coordinates the Reserva branch of environmental research

Camera traps around the Reserva capture images of illustrious inhabitants like the ocelot and the *cateto*, a wild pig



species”; evaluates Fabiano R. De Melo, a professor of Biological Sciences at Universidade Federal de Goiás (*campus Jataí*), a federal Brazilian university. In 2014, the Reserva was authorized to receive new individuals of the species by the PAN Muriqui, acronym in Portuguese for National Action Plan for Muriqui Conservation. “By the end of 2015, we found a lonely muriqui female, Esmeralda. We spent some months following her in the wild, observing her daily activities and this year in January we could effectively capture and transfer her to the region of Mata do Luna. There are already two males waiting for a mating partner to begin the restocking of the Reserva do Ibitipoca’s forests, an essential legacy that must be guaranteed for the next generations”, says the researcher responsible for this fragile logistic operation.

WITHIN REACH
According to estimates, 500 years are necessary for a degraded area to be able to recover its original vegetation in full. “We see that the forest is resilient and that it is going to return. Some areas need more help; others are stronger, full of life”, evaluates Brittany Berger, who arrived at the Reserva for a six month stay. She identified herself so much with the place that she has been living there for four years now! Starting as a volunteer English teacher, today she coordinates the socio-environmental projects. In the beginning her activities were centered on environmental education, in an attempt to involve the community: “For understanding people’s interests, I talked to a local educator and she looked at me and said ‘ah, environmental education, how boring...only water and trash’. In order to

change this superficial understanding, Brittany and Fernanda Motta, a graduate student in the area of Biodiversity, at Universidade Estadual do Rio de Janeiro (UERJ), a state university, developed in 2015 a project called *Escola Mais Verde* (Greener School). The project was implemented in São José dos Lopes, a village near the Reserva, The subject discussed with the students was the “backyard” of their houses, namely the rupestrine fields, one of the vegetation formations that is part of the Atlantic Forest’s biome. “I believe that we conserve what we love and we love what we know”, summarizes Brittany. Today the Reserva invests in a project at a municipal school, in Conceição do Ibitipoca, targeting students from the 5th to 8th grades. It is coordinated by Fernanda Motta, who now counts on the support of the school itself and

from the GEIA (Grupo de Estudos Interdisciplinares do Ambiente/UERJ), an environmental interdisciplinary study group from her university. When they pass along knowledge about the local fauna and flora and the water resources and try to rescue the local cultural values by the means of dynamic activities and guided visits to the park and to the Reserva, the expectation is that these girls and boys will enthusiastically spread the word. “The Reserva complements the park: their ecosystems are interdependent and this interaction is very important to the balance between them. Protecting an ancient species means to protect an entire ecosystem”, explains Fernanda. Brittany is responsible for organizing the visits and she is always delighted by the students’ reactions: “When we took a group to Gruta do Andorinhões, a cave that

Small waterfalls formed by the Salto River, near the park’s restaurant. Bushes typical of rupestrine fields mark the landscape





Rich in organic matter that adds to it a peculiar red tone, this super clean water is the trademark of Ibitipoca's region



Scenes of wellbeing: hens wandering freely and, instead of the violence of slaughtering, horses can retire in nice areas

has a water fall inside, a child asked me: 'did nature make this?' It was so cute!" Not only the very young take their time to discover the wonders surrounding them. Expert in trail maintenance—and celebrating a decade of work at the Reserva—Ozamar de Paulo Machado followed the changes in his local land and culture: "In the past, people would burn and then level the woods, even with governmental incentive. The water became scarce and today I see that it is coming back—and it is good to drink! Now everybody talks about preservation, times have changed, we do not raise kids as we used to. I learned many things and I have the life I asked God for: I don't want a piece of heaven because I'm already in it." It is touching to realize this change of perception among the locals. Even more so when we see the exchange

of knowledge between them and the people coming from big cities in a kind of reversed urban exodus. It is the case of Carmen Lucia Damaceno, from Juiz de Fora. Specialized in raising native bees, she says that the bees she works with lived here before the introduction of the foreign *Apis mellifera* (like the European and African types). In addition to producing special honey, they do not sting and are docile and easy to manage. In possession of Ibama's (Brazil's environment authority) license to operate, she plans to extend the native beekeeping, generating scientific data about the development of bee colonies as a kind of ecosystem preservation. "Without the bees' pollination, 80% of agricultural crops would be seriously compromised." The respect toward bees extends to all the animal relations in the Reserva: hens wander freely, part

of the milk from the cows and goats is kept for their offspring and the horses are well treated. Instead of being slaughtered when they are too old or cannot work any more, they 'retire' at Chapadão, a nice area inside the Reserva. This principle of caring also includes a strong policy of waste reduction, aiming to minimize trash: there are bamboo baskets for transporting and storing food and disposable bags are always avoided. The environmental consciousness also includes mobility and transportation. The electric 4X4 cart has replaced diesel vehicles and the motorcycles gave way to electric bikes. Soon electric drones will be able to deliver products and agricultural supplies, making the logistics inside the Reserva even better. Agroforestry production of food, dignified treatment for animals, the sharing of knowledge, the appreciation

of local culture and an effective environmental education are all being diligently weaved into the big web of the Reserva. The Brazilian theologian, Leonardo Boff, once wrote that "caring is more than an act, it is an attitude. Therefore, it covers more than a moment of attention. It represents an attitude of concern, preoccupation, responsibility and involvement toward others."

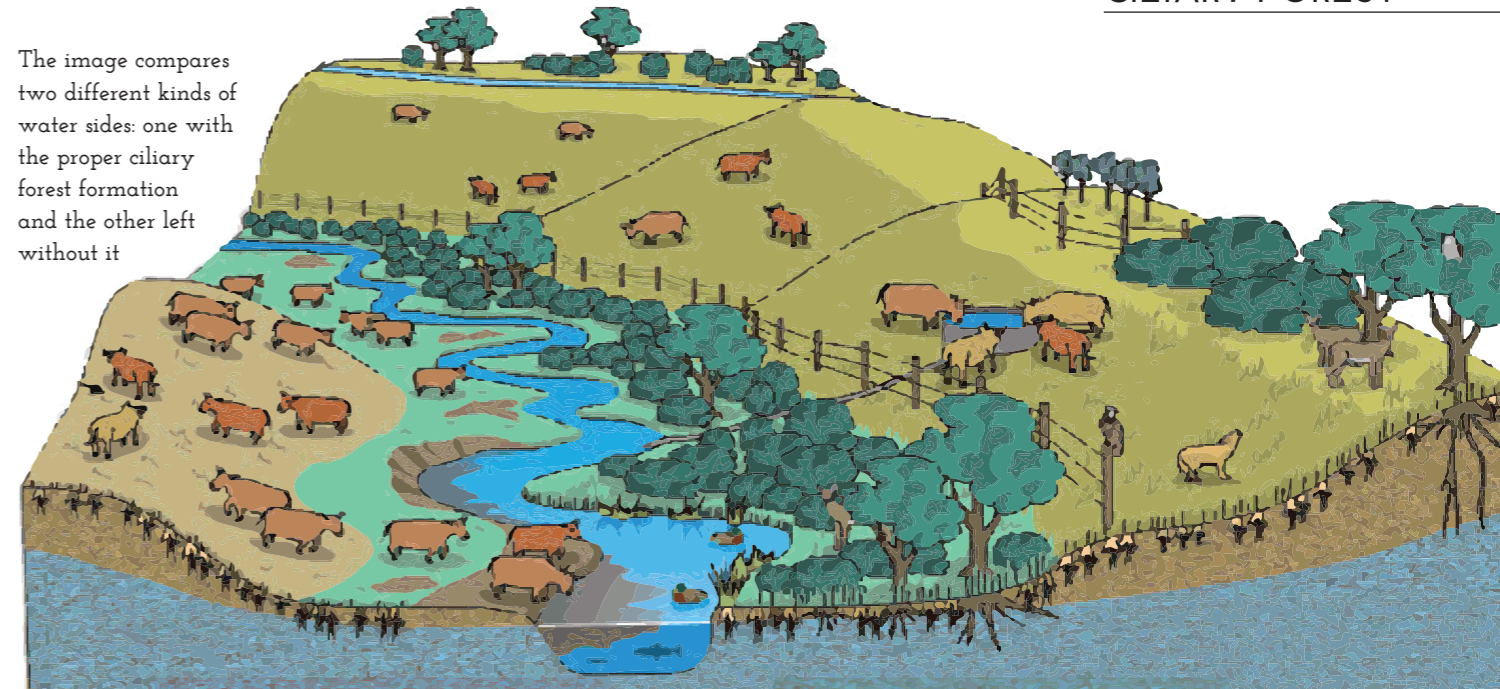
LEARN MORE:
 :: The Agenda 21 is a document signed by 179 countries at Rio 92, the United Nations Conference on Environment and Development, which defined an action program for a new pattern of development. Its goals are sustainable societies that reconcile environmental protection, social justice and economic efficiency.

The Parque Estadual de Ibitipoca is one of the gems of Minas Gerais State. The Reserva do Ibitipoca helps to protect this sanctuary

GREAT NEIGHBORS



The image compares two different kinds of water sides: one with the proper ciliary forest formation and the other left without it



WRONG PRACTICE

RIGHT PRACTICE

A singular landscape of rupestrine fields' fauna and flora, cliffs, hill sides, deep gorges, water falls and reddish river waters composes one of the most astounding sceneries in Brazil, the state park Parque Estadual do Ibitipoca (PEIb). Internationally known for its quartzite caves with speleological formations of enormous geographical and environmental relevance, the Parque, created in 1973, now ranks among the three best in Latin America, according to the travel site TripAdvisor. Until the beginning of the 17th century, this and all of the Serra do Ibitipoca's area were inhabited by the Aracys, a peaceful group of native Brazilians, soon exterminated by the explorers, the so called bandeirantes, who transformed the area into a passageway to the Paraty Port, creating the trail known as *Caminho Velho* (old path). Due to its geographical location, soon

thereafter the village of Vila do Conceição do Ibitipoca was built and by 1718 it already contained 7,000 inhabitants, a considerable number for the time! For the common passers-by, the village today hardly reminds one of its past relevance, but we can imagine and trace back some of the adventurers and traders' steps by observing the colonial architecture, the rocky paths, the walls and churches. This historical mark added to the natural attractions and, of course, to the park, gives visitors, tourists as well as the local community a special meaning. We talked to João Carlos Lima Oliveira, who has been the director of the park (PEIb) for the past eight years, about the relationship with the Reserva.

Raquel Ribeiro: In which ways does the Reserva support the park and vice-versa?

João Carlos Lima de Oliveira: *Having a protected area (Reserva) surrounding a preserved area (the Park) is a way of preventing negative impact. This means the Reserva de Ibitipoca acts like a buffer suffering first any external impact, such as wildfires or a hunting group, and solves it before it reaches the park. It is logical then that a partnership exists between us. For example, recently a fire reached us and it was controlled with the total support of the Reserva: vehicles, equipment and trained employees were engaged in fighting it. This partnership is continuous: whenever there is a problem, we communicate to solve it together. The partnership also applies to the good things as well! The Reserva funded and organized a course for a fire brigade and offered a few vacancies to the park staff. We sent five employees to be trained there. Until last year, the park had five*

annual courses for fire brigade and then it was our turn to offer space for the Reserva team.

R: The Reserva also provides a series of 'ecological corridors', right?

JC: *To be surrounded by a unit of conservation is always beneficial because the Park is not an island anymore. The Reserva do Ibitipoca is twice the size of the Park and this is great for the Park and for the region's fauna because it enables more opportunities for genetic exchange and hence more sustainability for both the park and reserve.*

R: How does the community act when facing a fire threat?

JC: *In the last fire, for example, we had many more volunteers than Park employees. The fire showed this availability people have to help. It showed to the state authorities that our Park attracts more volunteers than the average parks in Minas Gerais.*

THE GUARDIAN OF THE WATERS

The ciliary forests form a peaceful army to protect the rivers. Replanting and preserving this vegetation is the way to guarantee the quality of their waters

Water is the fundamental resource in the reforestation process. When we protect a water spring or a little water course, we put in motion a complex gear in nature's cycle. The great defender of those waters is the ciliary forest. The name ciliary comes from "cílios" that in Portuguese means eyelashes. Just like the eyelashes protect our eyes from impurities, the ciliary forest, whose trees work like disciplined soldiers, saves the soil by reducing the impact of rain. Instead of falling straight on the bare soil and transforming it into mud, the rain water is 'filtered' by the trees canopies and roots. This reduces the risk of sedimentation and prevents the introduction of pollutants and sludge into the soil, maintaining the balance of the aquatic ecosystems. The vegetation that edges the water

springs, creeks, rivers, lakes, lagoons and dams forms corridors that are indispensable to the conservation of biodiversity; it provides food and shelter to various animal species. But can any tree serve as a water guardian? Otacílio Geraldo Lage, a technician in agriculture and cattle raising, explains that there is scientific knowledge involved in this kind of reforestation: "It is important to plant trees in different growth phases, pioneer species that attract wild fauna to encourage the spreading of seeds, and to reintroduce species threatened with extinction. Some species are specially helpful, like *inga*, *aroeira vermelha* (*Schinus terebinthifolius*), *esponjinha* (*Calliandra brevipes*), and *angico branco* (*Albizia niopoides*)". Otacílio is responsible for planting and maintaining many areas in the Reserva do Ibitipoca and his team

planted more than 5,000 seedlings in 2016! The work, however, goes beyond planting, because a period of about three years is necessary until the reforested ciliary forest can be fully established and keep growing on its own. An Ibitipoca native, Otacílio worked for 27 years in the fields of food production and planting at Instituto Estadual de Florestas (IEF), the state institute of forestry. His knowledge and experience bear fruit now in his own garden, filled with native and fruit trees. From this enormous nursery come the seedlings intended to form the lines that will protect the rivers, where each tree is on a mission. The ones closer to the water have superficial roots and are planted in larger quantities, while the ones farther from the water sides have deeper roots and taller treetops.

FLYING WITH YOUR EYES

If you are curious, attentive and patient, you can go on an exhilarating journey that causes zero impact on the environment: Birdwatching



Tangará-dançarino



Surucuá-variado



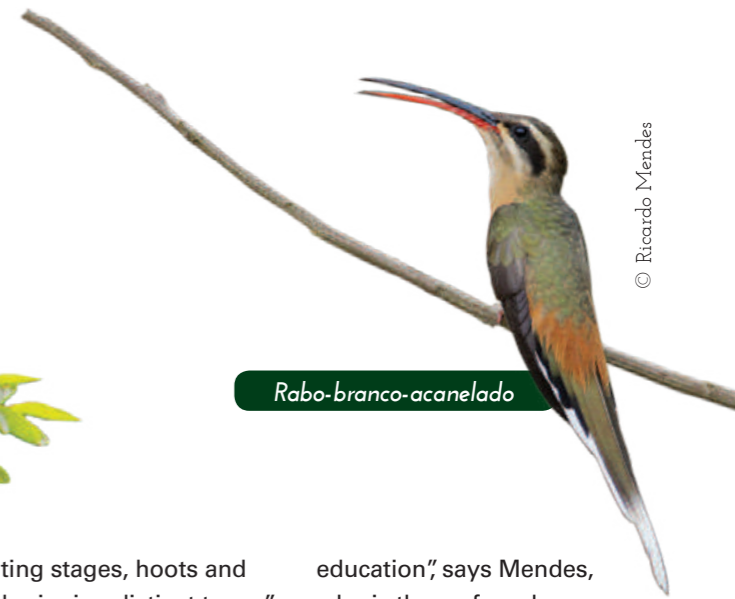
Maria-preta



Jacurutu



Saíra-douradinha



Rabo-branco-acanelado



Tiê-sangue



Gibão-de-couro

The first impression one has when arrives at the Reserva is that the grass seems to be made up of bird seeds, as there is an enormous quantity of birds around. Next to the kitchen door, at the main house of *Fazenda do Engenho*, two Hyacinth macaws act as sentinels; at the porches (and even in the main hall) two greedy toucans wander freely, while a family of rails proudly parades on the patio. Humming birds, goldfinches and canaries peck and fly around the house. According to Ricardo Mendes, photographer born in the region and a guide expert in birdwatching: "There are about 200 species that have already been recorded during the observation activities at the Reserva and certainly there are more treasures to be discovered. The search requires a disposition to wake up early and attention to details: flowering and

fruiting stages, hoots and birds singing distinct tones," he teaches. The diversity of the environment and the high level of preservation attract species of multiple colors, shapes and sizes, such as the Black-Chested Buzzard eagle, which lives on top of the steep rocky walls, the Rufous-sided crane, a small rail bird found in flooded areas, and the jacuturu, the biggest owl in all the Americas. "Beyond those, there are the eye-catching Brazilian red and green bellied curucus, the colorful tanagers, ten species of hummingbirds and woodpeckers from the smallest to the robust woodpecker, the largest in Brazil," adds Mendes. "I started photographing birds by chance and through the web I met people sharing the same passion. Naturally, I became interested in other aspects of birdwatching, such as biology, sustainable tourism and environmental

education," says Mendes, who is the co-founder of the platform *Táxeus* (a collaborative online tool that promotes knowledge about Brazilian biodiversity). Mendes visited the Reserva and has already surveyed the exuberant woods near Garnet and places surrounding Casa Nova. He was impressed by the quantity of birds he could see at each single exploration.

LEARN MORE:
 :: ricardomendes.eco.br and minasbirdingtours.com.br

OUR CRAZY HOLLOW EARTH

"Cracked Mountain" is one of the names given to Ibitipoca, perhaps in an allusion to the many caves in the region

In January 2016, in their first exploratory visit to some of the Reserva's caves, Guilherme Salgado, environmental engineer, and Heitor Cintra, speleologist and environmental engineer, found and identified some basic features regarding the caves' touristic potential

It's almost impossible to be at Reserva do Ibitipoca without being impressed by its exuberance. However, it is a mistake to believe that strolling its beautiful trails is enough to see all that those mountains have to offer. In some cases, it is necessary to go beyond, or below, toward the underground, where there is a world to be discovered; one that is mysterious, instigating and full of surprises. It is not just now that the caves in Ibitipoca fascinate people. The name of the mountains, given by their first inhabitants, before the colonizers' arrival, probably derives from its geological condition. One of the most accepted versions for the toponym Ibitipoca comes from the tupi language: "burst/cracked mountain", in an allusion to the many caves spread throughout the landscape. The Reserva do Ibitipoca has six registered caves at the Brazilian Society of Speleology. Nevertheless, many others are known to exist there. These caves, as well as others in the region, were developed in quartzite rocks: the formation of conduits and chambers starts with the dissolution, by water, of their mineral components. Then, other processes contribute to this fabulous architectural project of nature, such as erosion, landslides and the action of plants and animals. Those visiting the caves in careful attention will appreciate the small and fragile formations, the so-called speleothems. These mineral deposits can take hundreds, even thousands of years to develop and while they may not be as spectacular as the ones in limestone caves, they are geologically as important. The speleothems not only grant great beauty

to the caves, with their shapes, colors and textures, but also provide data about their development and the changes they went through. Speleologists and geologists are in charge of studying their secrets. Many animals inhabit the caves and contribute to the beauty of the Reserva. Even though there was not yet a specific survey of the area's fauna, many species of bats, spiders and opiliones (an arthropode from the arachnida family), crickets, and swift birds have already been recorded. The biscutate swift, a migratory bird, is one of the species that finds shelter there. Beyond all the natural beauty, these caves have been used by many in the past, like hunters, fugitives, religious people or those simply in search of protection against rainstorms. Some signals of their passage like inscriptions on the walls or very small constructions still remain. At Gruta do Tocão^[1], the path to which is an adventurous trail, there are historical inscriptions on the ceiling, probably from the early last century. People from the local community say the cave was a hiding place for runaway slaves.

An entrance to the cave Gruta dos Andorinhões. Here it is possible to see how water and roots play a role in cave formation

^[1] In Portuguese, it is common to employ the term 'gruta (grotto)' for caves and crevices



WITH EYES OPEN TO THE FUTURE

Protecting the murreti monkey means to preserve the forest, the water springs and biodiversity. Meet this Brazilian primate and share the enthusiasm of the American researcher KAREN STRIER

PHOTOS BY PABLO FERNICOLA

Peaceful and calm, these monkeys do not rush to feed themselves, nor do they show any jealousy in mating, and they know no hierarchy; they like to be together, hug each other and contemplate the world with placid eyes. The young females are free and wander alone in search of partners in other areas. It sounds like we are talking about a hippie community from the 70s, but this description applies to the murreti monkey, the largest primate in the Americas. The murreti is an exclusively Brazilian species and is severely threatened of extinction. Considered a “flagship species”, just like the giant Panda in China, today there are fewer than three

thousand individuals, with one thousand murretis in the North and less than two thousand in the South. Mata do Luna, in the Reserva do Ibitipoca, was one of these few strongholds, where there was a group with only a dozen monkeys. Due to the absence of females, the group went down to only two males.

José Vicente de Paula, an experienced woodsman and an employee of the Reserva, was ‘born and raised’ in the region. He tells that he used to see murretis quite often when he was a child. “The group lived more in the part of Paredão (big wall), but a farmer there cut the woods down and they had to relocate to Mata do Luna.

This is what the elders used to tell us. I was a kid, about 8 years old, and I remember seeing the murretis with their babies on their backs. And I know they were many because we could see the treetops shaking when they were moving around.

Then this shaking decreased. We don’t know if they started dying or if they were moving away from here, but we know they became rare.”

Upon sexual maturity, the females abandon the group to find other partners. When there is no other group to be found (as in the case of Mata do Luna), the female gets lost and ends up isolated from her group. Because there is no evidence of murretis

B.A in Sociology, Anthropology and Biology at Swarthmore College (USA), M.A and PhD in Anthropology at Harvard University, Professor at the Anthropology Department of the University of Wisconsin, Madison and Professor at the Universidade Federal do Espírito Santo (UFES), Brazil. She is author of *Faces in the Forest: The endangered murreti monkey of Brazil*

SEE THE VIDEO





in a radius of hundreds of kilometers, the few females available there disappeared over the years. For this reason, for the people working at Reserva, the friendly primate became the symbol of the great return of nature. They know that the effort to recover its population will be beneficial to all of the Atlantic Forest. Betting on the reintroduction of females and investing in the strengthening of the group implies conserving and reforesting large areas and thus protecting their biodiversity. This is the goal of Karen Strier, American anthropologist, tireless researcher and a supreme authority in the study of muriquis – a tupi-guarani term that means “gentle people of the forest”.

She coordinates the Projeto Muriqui de Caratinga. Since 1983 the Project has researched a population of muriquis which now amounts to 350 individuals. As a great collaborator of the Reserva do Ibitipoca, she treated us to a long chat (in fluent Portuguese) about her more than thirty years of research. She celebrated the fact that the Reserva, after rigorous evaluation by ICMBio, is considered suitable to shelter new individuals, starting with two additional female muriquis, Esmeralda and Socorro. Since last January, the former has been Mata do Luna’s newest resident. The latter is still being monitored by experts. Equally kind and determined, Karen gains

everyone’s sympathy with her contagious enthusiasm.

RAQUEL RIBEIRO:
Why did you decide to come to Brazil?

KAREN STRIER: I came here for the first time in 1982, in search of an idea for the doctorate program I was attending at Harvard University. I went to Caratinga, in Minas Gerais state, where they had a population of muriquis and it was love at first sight. It was fantastic! I decided then and there that this was going to be my dissertation topic. I started collecting data in 1983 and lived for 14 months at the ‘mouth of the forest’ in Caratinga, studying the muriquis. It was unbelievable. Every day, a new discovery!

Mata do Luna is one of the last refuges for the muriquis. Free from hunters, this forest may become a sanctuary for such a vulnerable species

Nobody knew they were so peaceful or that they obeyed no hierarchy and that the females are super independent while the males are very affectionate. I had to return to the United States in 1984 but came back in 1985 to verify if there were any babies. All in the group were identified by individual marks, like details on their facial fur, which works as a digital impression. I was able to raise funds and establish partnerships with Brazilian scientists, scholars and interns and today the project of monitoring the behavior of the muriquis in Caratinga has reached 33 years of existence, with the training of staff, Brazilian students, researchers and biologists

interested in primates and conservation. Along the way, all that we learned about the muriquis turned out to be useful for their conservation.

RAQUEL: *Were the research findings positive?*

KAREN: In Caratinga, because we were lucky and because of the forest conservation, the population of muriquis was increasing. Today we have over 350 of them divided in four groups, in a preserved forest of 1,000 hectares. But their density was too high! So I started thinking about options to help the Caratinga muriquis as well as those without much space or who are isolated. It was then that I first came here and found out what

“Imagine a world without hierarchy, a society with no wars and only love. This is the model of social behavior of the muriquis that is also a model for the understanding of the evolution of human societies. How can we allow this model species to go extinct?”

KAREN STRIER



has been done in Ibitipoca. I saw the way that the community and the people working both at the Reserva and at the Pousada (lodge) perceive this project... They are people with a vision, they show commitment and optimism!

RAQUEL: Muriquis are evidently special but how do they contribute to scientific knowledge in general?

KAREN: They are primates, very similar to human beings. In some aspects, it is a model of how we could be: peaceful and supportive. When we think about human evolution we always think of Africa (where so many ancestral hominid fossils were found) and the primates more genetically close, like

the chimpanzee and the gorilla, which also provide important behavior models. Even with the baboons, which left the trees to walk on the ground, we learn about our history. People thought that a “primate from the New World”, like the muriqui, could not have much to teach about human evolution. I used to think this way too but I was willing to see a different model and the muriquis surprised me. In Caratinga, as their population increased, they reached the limits of the forest. With no other place to go, this arboreal species found a solution for finding more food by coming down to the ground! The interesting thing is that then they started showing fascinating

aspects in their posture. We have records of individuals walking erect, standing on their feet, when their bodies were made to move around by hanging from treetops; they were able to adapt to this new posture on the ground. This change in behavior, this potential to adopt a bipedal posture for locomotion, this flexibility, is fantastic! I showed pictures and videos to a colleague in the US, who works with the evolution of the human as bipeds, and he was “startled”. He told me they were in search of a primate that could display this ability so rare among primates. The muriquis, due to the shape of their lower back and pelvis structure, are able to hold

When their habitat changes, the muriquis show flexibility in behavior but keep their peaceful nature

an erect position when they stand up. We just published an article in which we compare such models of standing. Nobody could imagine that we would be today looking at the muriquis to have an idea of how this change – in bones, skeletal structure – occurred so that humans could become bipeds.

RAQUEL: To conclude, please tell us about Esmeralda, the famous muriqui that arrived to be a companion for the two males of the Reserva.
KAREN: Well, the two males did not have much of a future... My colleagues, led by Fabiano R. de Mello and assisted by the biologist Fernanda Tabacow, found

a female in a district called Esmeraldas de Ferro, a town in Minas Gerais state. She was isolated in the forest, without no other group. For months, the team of researchers followed her and waited patiently until she got used to them. They finally captured her and took her to the Reserva. If everything goes well and she gets pregnant soon, in a time span of a little over 7 months maybe the first baby of this population will be born, thereby giving continuity to the genetic biodiversity of the male muriquis of Ibitipoca. That would be the first step for the conservation of this population of muriquis and a big achievement for conservation in general.

Of course, a single female will not solve the entire problem. But there is now the possibility of having another one and then we will help this population to increase again. The people of Reserva already bought new forest and this area allows for the formation of ecological corridors between the smaller forest areas. With food in the forest and safety against hunting, the group tends to grow. I find it inspiring to think that here in Ibitipoca, where there were once many muriquis, we can help in increasing their population. They are part of the heritage of this region and of Brazil. I, as an American, by chance or karma, was awarded the opportunity to participate in all of this.



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MURIQUI-DO-NORTE

Species: *Brachyteles hypoxanthus*

Genus: *Brachyteles*

Subfamily: Atelinae

Family: Atelidae

Infraorder: Platyrrhini

Order: Primatas

Class: Mammalia

Phylum: Chordata



“LOVE ME, TENDER...”

The muriqui do norte (Northern Muriqui), also known in Brazil as mono or monocarvoeiro, is the largest non human primate in the Americas and the biggest endemic Brazilian mammal. It can reach 5 feet in length and weigh up to about 33 pounds. The muriqui has a life span of 40 years and is found only in the Atlantic forest. It is estimated that a century ago there were about 100 thousand muriquis; however, hunting and deforestation drastically reduced its territory. Equipped with a prehensile tail and long arms, the muriqui moves fast from tree to tree with agility, ease and elegance. This athletic quality made it an ideal candidate for the Rio 2016 Olympic Games’ mascot. The candidacy was even supported by one of the most respected organizations in environmental programs in the world, Conservation International (CI). Russell Mittermeier, the entity’s president and a renowned primatologist, stated that: “The muriqui has the same great importance as China’s giant panda. It is a really symbolic animal species for Brazil”.

Found only in Minas Gerais, Espírito Santo and south of Bahia, the Northern Muriqui needs large preserved areas to survive. As a seed spreader, the muriqui acts as a “natural reforestation” agent. Supportive, they search for food collectively. With their tails they form bridges to help each other cross between trees. The mothers carry their babies on their backs for two years, while they observe and learn how to select food.

Docile by nature, the muriqui lives in groups and knows no social hierarchy. Males and females have similar sizes and unlike many other animal groups, there is no alpha male or a fighting dispute for mating. In fact, the males share a female and wait for their turn... hugging one another. By the way, it seems they hug each other for everything: when feeling threatened, whether sad, happy or hungry. And they hug on the ground as well as when hanging from tree tops with their strong tails.

LEARN MORE:

- :: preservemuriqui.org.br
- :: iucnredlist.org/details/2994
- :: facebook.com/projetomuriquicaratinga
- :: facebook.com/muriquibiodiversidade
- :: promuriqui.org.br
- :: strierlab.anthropology.wisc.edu
- :: icmbio.gov.br/portal/faunabrasileira/plano-de-acao-nacional-lista/616-plano-de-acao-nacional-para-conservacao-dos-muriquis

THE AMPHIBIANS' RICHNESS AT SERRA DO IBITIPOCA



Aplastodiscus leucopygius



Thoropa miliaris



Brachycephalus sp.

One of the most interesting mountain ranges in Brazil, Serra do Ibitipoca features a prominent elevation among its neighboring slopes and polyconvex hills, reaching altitudes of about 5,853 ft. (Morro da Lombada). It divides the watersheds of the rivers Grande and Paraíba do Sul and contains an exuberant biodiversity.

The group of anuran amphibians is one of the richest of Ibitipoca's fauna: there are already 40 species of frogs and three of them have already been cataloged. The majority is indigenous to the mountainous regions of the Brazilian southeast. There are species living exclusively inside the ombrophilous forests of altitude, occupying bushes and sub-wood groves like the *perereca de vidro*, a genus of *Vitreorana* (*V. eurygnatha* and *V. uranoscopa*) that lays its clinging eggs on overhanging leaves above waterfall creeks; and the chocolate foot tree frog (*Phasmahyla cochranae*) that rolls its eggs inside leaves giving them the shape of cylinders. Both species adopt these tactics to keep their eggs clear of the aquatic environment,

avoiding predators both during spawning and the early period of the larvae. Tree frogs of the *Aplastodiscos* genus (*A. Arildade* and *A. Leucopygius*) and *Bokermannohyla* (*B. nanuzae* and *B. ibitipoca*) are also present here. The *Bokermannohylas'* species are known in Brazil as striped frogs due to the vertical stripes on their legs. They appear in the "capões," forest clearings along the mountain ridges, inhabiting the vegetation on stream sides. The *B. ibitipoca* croaks from inside cracks formed by tree roots and bushes, where they lay their eggs. The *Aplastodiscos* species are generally called green tree frogs due to their characteristic color. They spend most of the night in activity very well hidden under branches and leaves. Each of these animals has its own particular croaking style, which can be heard even from long distances. Most of the time they perch 5 meters above the soil on higher vegetation, which makes it difficult to precisely locate them. In the depth of the forest there are species that choose the dense layer of foliage and plant debris

as their preferred habitat. Known in Brazil as *pingo de ouro* (golden drop) for its intense yellow color, the *Brachycephalus sp* is spread out in this environment and can be observed during the day, emitting a warbled sound, similar to crickets. It lays its eggs during the rainy season and, when they hatch, the offspring's body is already developed, having skipped the aquatic larval stage. This amphibian was never observed inside the Park — it was recorded only in the woods of altitude, at Reserva do Ibitipoca, which reinforces the value of a protective belt in the Park's neighboring areas. Other species characteristic of this kind of vegetation but not limited to its environment are the ones of the *Ischnocnema* and

Haddadus genera. They also have a straightforward development and are found in the forest's boarding areas and on grassy fields. They are little tree frogs that are seen in the summer. When the humidity increases outside of the woods, nearby trail walkers can day and night hear a short warbled whistling along the way. There is also the little horned frog (*Proceratophrys mantiqueira*) that has dermal extensions over its eyes. They live inside the woods, favoring flooded areas. They produce a hoarse, prolonged singing that adds to the complex symphony of the night. The few lagoons and ponds with still water in the mountains shelter typical amphibians such as the yellow frog (*Rhinella icterica*), the little wart

frog (*Odontophrynus americanus*), the commonly called dog tree frog (*Physalaemus cuvieri*), the blacksmith tree frog (*Hypsiboas faber*), the white-spotted tree frog (*Hypsiboas albopunctatus*) and the frog in pajamas (*Hypsiboas polytaenius*), as it is known in Brazil. These species are largely spread throughout the Brazilian southeast and live in environments that have been severely altered rather than in the preserved ones. On the other hand, some species such as the *Trachycephalus imitatrix* and *Scinax squalirostris*, typical from pounds, seem to live only in certain places, such as open environments at Lagoa Seca. The lake's still water, surrounded by rupestrian fields and high altitude woods, is unique at Ibitipoca and also attracts the *Elachistocleis*

cesarii (known in Brazil as *rã bicuda*) that breeds abundantly. After hard rains, multiple individuals of this species appear at once. They breed frenetically and then they seem to disappear. Also sharing this habitat is a small spotted tree frog from the genus *Physalaemus rupestris*. For a long time it had been known only in the Serra do Ibitipoca. Today it is known that they are also found in a neighboring mountain range, Serra Negra, and live in small pounds inside high altitude forests. Another curious species is the *Thoropa miliaris*. It is found on rocky walls even outside the woods and for this reason is called the tree frog of the rocks. It also lays its eggs on the rocks and its tadpoles are observed in temporary, small water streaks on rocky walls or slabs, where

they develop and morph. The species *Lectodactylus cunicularis* builds small underground galleries outside the woods, where it lays its eggs. Their tadpoles eventually reach the pounds when the area floods. The majority of the amphibians are nocturnal and active during the hot and rainy months. The little tree frog *Hylodes amnicola* is an exception: It is a daytime amphibian which breeds the entire year. During the hottest hours of the day, it can be seen emerging from the water by the rocks along the river Rio do Salto, and in the region of Ponte da Pedra. Their croaking competes with the tourists' voices. The species from the genus *Scinax* (*Scinax*

flavoguttatus and *Scinax luizotavioi*) prefers the depths of the woods. Surprisingly, they croak and breed in the cold and dry months, at which time the creeks are lower and offer roots and branches close to the water stream for egg laying. The variation in habitat preferences allows many species to be in the same area and share its resources. The wealth of vegetation types and different environments of this mountain range provides this incredible diversity of species, featuring Ibitipoca as one of the locales with the largest number of species in reduced areas in the Brazilian southeast Atlantic Forest.

LEARN MORE

:: *Anfibios do Ibitipoca*. Cruz, C.A.G.; Feio, R.N. & Caramaschi, U.; Murta, R. Bicho do Mato Editora, BH. 2009.



Bokermannohyla nanuzae

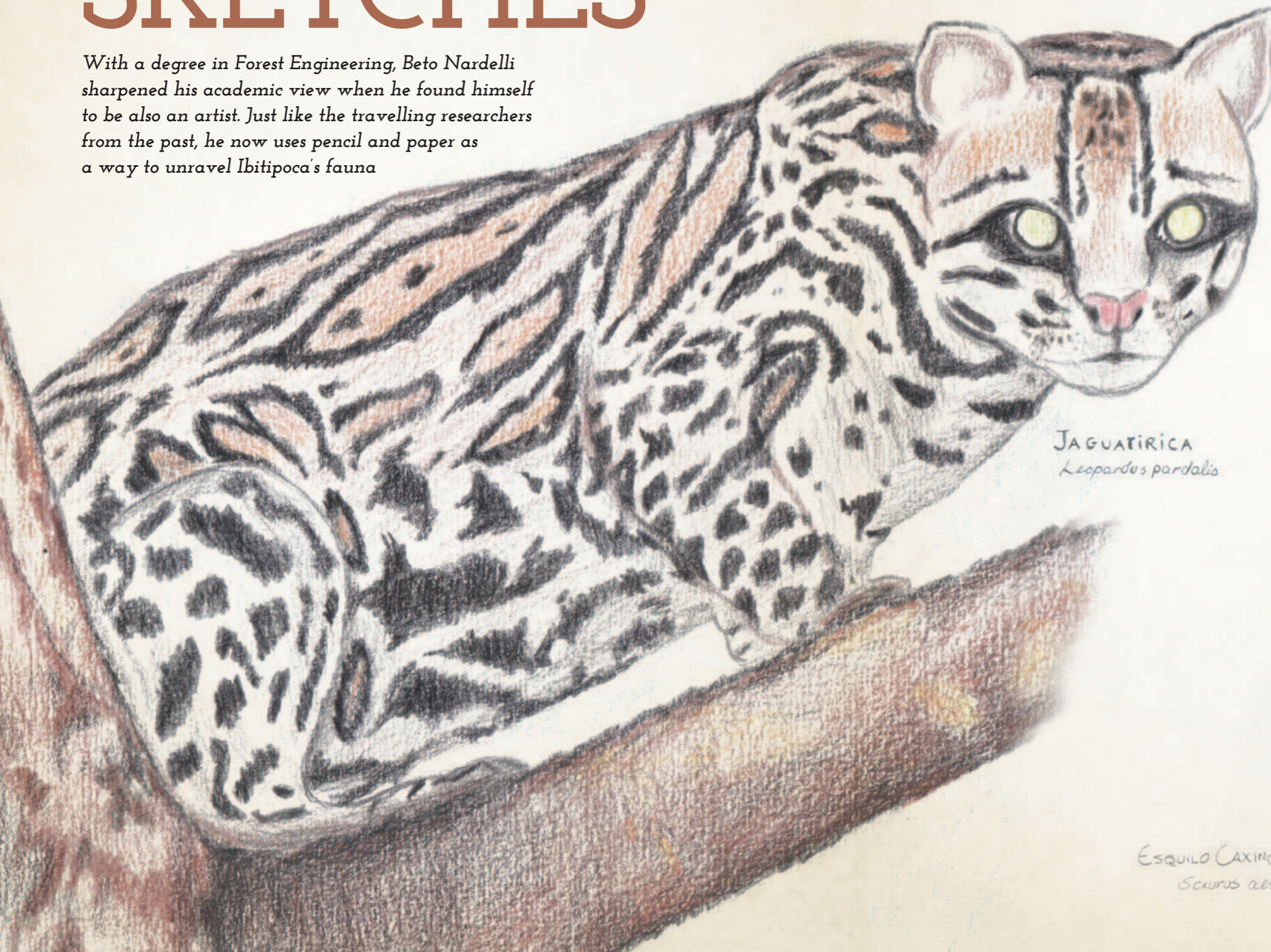


Aplastodiscus arildae

WILD SKETCHES

With a degree in Forest Engineering, Beto Nardelli sharpened his academic view when he found himself to be also an artist. Just like the travelling researchers from the past, he now uses pencil and paper as a way to unravel Ibitipoca's fauna

Text and illustrations: *Beto Nardelli*



JAGUARIRICA
Leopardus pardalis

Until a year ago, I couldn't draw anything that made any sense. But I like to learn. After finishing my last course, I missed the classroom environment. In reality I missed my classmates who had become my friends. On a certain morning, I had an epiphany: 'I'll enroll in Art school'. Then things started happening; with a lot of effort I started to draw objects, then faces, sexy women. I sketched nudes, sinister monsters and sport scenes. Finally, I chose the fauna of Ibitipoca. I began drawing my favorite animals. I'm fascinated by felines, they are so...*feline!*

The lively squirrels are small animals I love to observe are. I'm delighted to see them, so hyperactive and funny – just like the mischievous chipmunks Chip and Dale. We have also seen a lot, always in groups, of the *catetos*, a kind of wild pig. It is good they are here and that they are resilient, because the more exotic and penetrating European boar has arrived in the region of Bocaina and is making a mess.



ESQUILO CAXINGUELÊ
Sciurus aestivum

CAPIVARA
Hydrochoerus hydrochaeris



Lobo Guará
Chrysocyon brachyurus

IRARA
eira barbara



In my drawings there is a famous gaffe. While showing an image of a *tatu*, an armadillo, to a woodsman from our group, he said in broken yet categorical Portuguese: "armadillos don't bend their tails." It is true; I never saw an armadillo bending its tail. Ibitipoca is about all the monkeys reunited. Here we have six species: the pacific, the big and loving *muriqui-do-norte*; the mischievous and very smart *macaco-prego*; the noisy and beautiful *bugio* (or bearded monkey), the singing and gracious *sauá*, in addition to two species of *saguís*, a very small type of monkey. It is sad that the *cascavel*, a rattle snake, is very beautiful and gentle but has a powerful poison for hunting. Unfortunately, it can also be used against us when we step on it.

We have also heard about the anteater, *tamanduá* in Portuguese. This drawing of a *Tamanduá-mirim* (or *tamanduá de colete*: anteater wearing a vest!) is based on an image captured by a hidden camera, in the woods at the Reserva. Another little animal, which is very cute but stinky, is the *cangambá*, the skunk with a white stripe on its back, immortalized by the romantic and French Le Pew, which falls in love with Penelope Pussycat in the Warner Bros animation. Last but not least, there are two big mammals, the kings of the place: the *onça-parda*, a puma, and the *lobo-guará*, a maned wolf. Everyday there are new reports of sightings these animals, which are threatened with extinction. This makes us happy, because it signals the richness of the ecosystem.

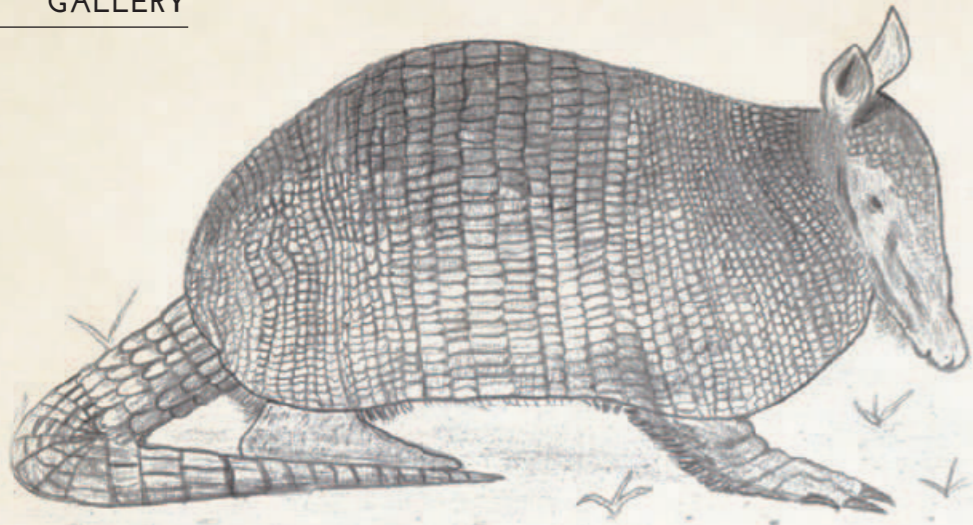
CANGAMBA
Comepatos semistriatus



BUGIO, BARBADO, GUARIBA
Alouatta seniculus

TAMANDUÁ MIRIM
Tamandua tetradactyla



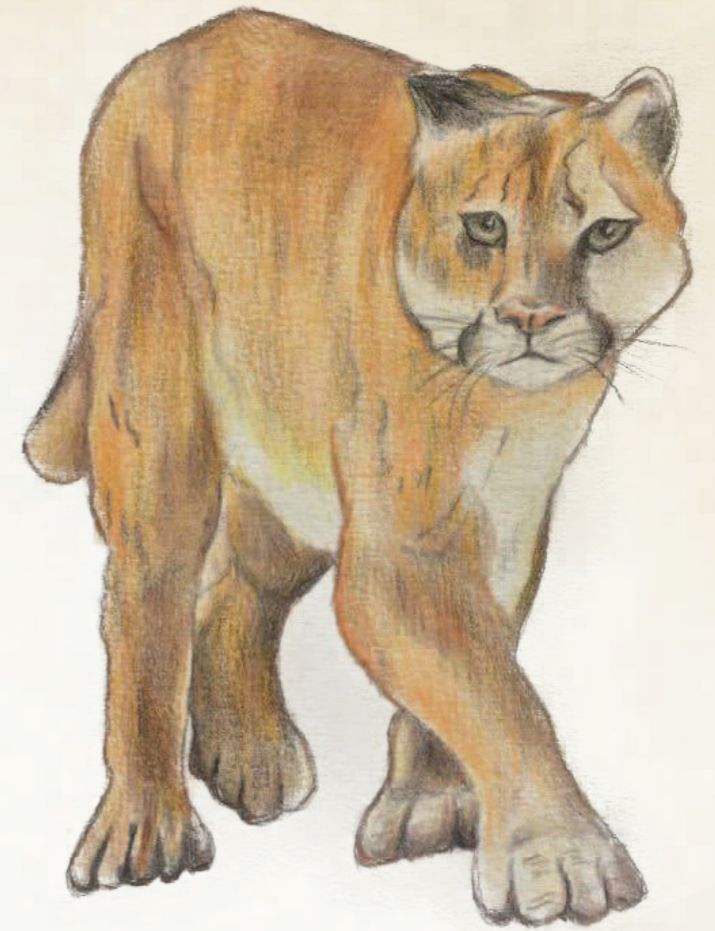


TATU GALINHA
Dasypus novemcinctus

CATETO
PORCO DO MATO
Pecari tajacu



MACACO PREGO
Sapajus libidinosus



SUSSUARANA, ONÇA PARDA, PUMA
Puma concolor



CASCABEL
Ceotatus durissus

"While showing an image of a tatu, an armadillo, to a woodsman from our group, he said in broken yet categorical Portuguese: "armadillos don't bend their tails". It is true; I never saw an armadillo bending its tail."

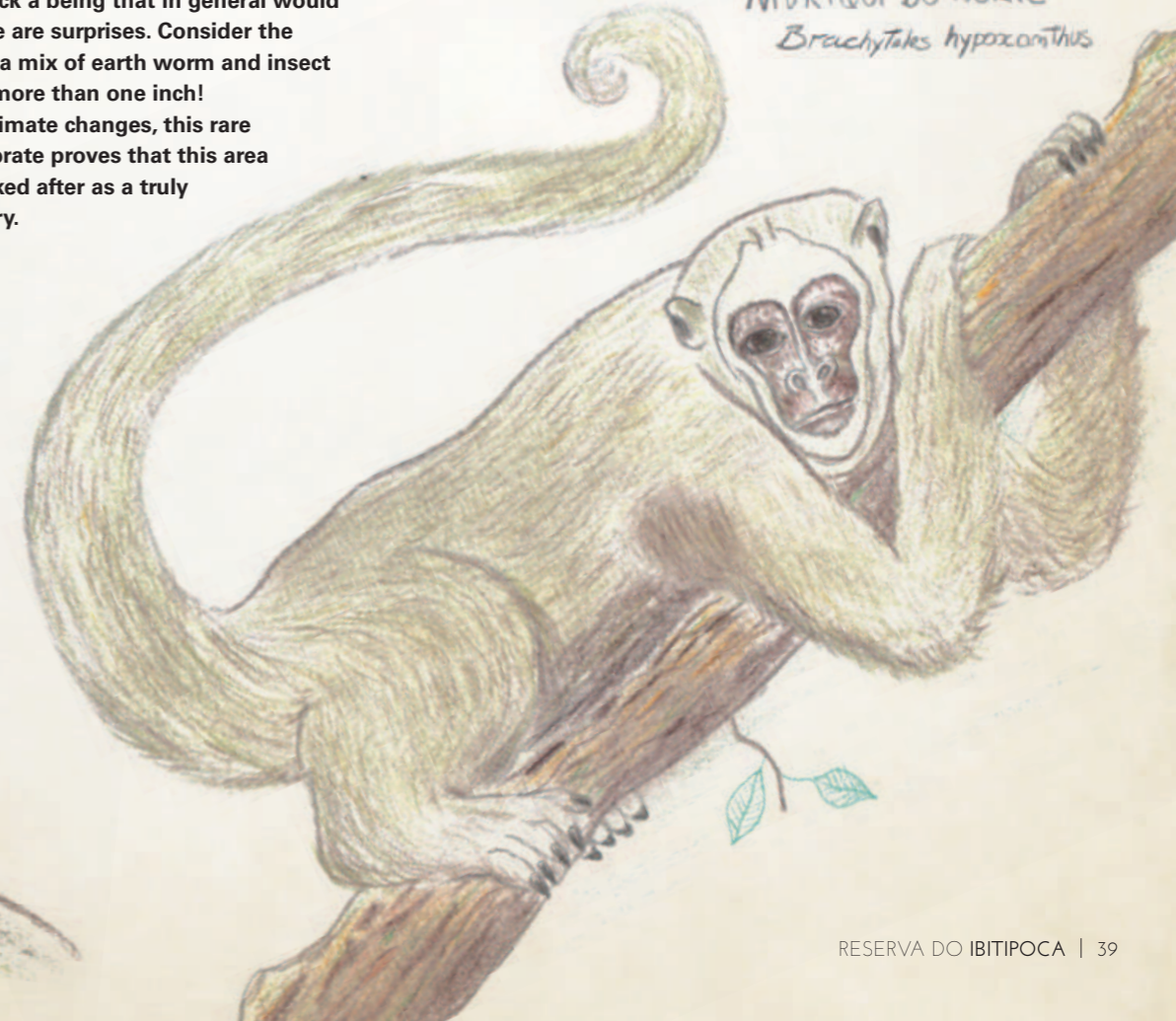
A SANCTUARY FOR ALL

The Reserva and the State Park of Ibitipoca do not display a specific animal as a symbol. This is meant as a way to point out their appreciation of the ecosystem as whole and the importance of the relationships among all the species. The *lobo guará* (maned wolf) has its charisma; the *onça parda* (puma), its charm; and the *sapinho pingo de ouro* (little golden frog), its mystery. Among the almost three hundred birds, it would be rather difficult to choose the most beautiful or the most interesting. Even if we try to pick a being that in general would go unnoticed, there are surprises. Consider the *Peripatus acacioci*, a mix of earth worm and insect that measures no more than one inch! A survivor of big climate changes, this rare prehistoric invertebrate proves that this area deserves to be looked after as a truly ecological sanctuary.

CUICA
Casita monodelphis



MURIQUI DO NORTE
Brachyteles hypoxanthus





ON THE ROAD

“What makes the Reserva so special? Nature, architecture, art, conservation?” For hours I went up and down the hills with this question in mind. Then, on a bumpy road, the answer emerged as clear as the sky on that day”

RAQUEL RIBEIRO

At the wheel, Aroldo de Oliveira remained quiet, concentrated on driving; acting as co-pilot, there was the witty Reginaldo Fagundes, also known as Régis, the man in charge of the Maintenance/Construction Works and currently a partner of the Pousada, or lodge. Next to me sat the Reserva’s manager, Raquel Pazos, from the Minas Gerais city of Juiz de Fora. She seemed at ease in the country environment. Among tales of pumas, haunted places and endless jokes, Régis showed me the natural beauty on our way to *Areião*, a part of the Reserva do Ibitipoca that borders the park at its north end. Adding an extra charm to the line dividing the towns Bias Fortes and Lima Duarte, a kind of “Land’s Art” piece by Régis, as if ignoring divisions, the rocky fence flanks the *Grota Funda’s* road, a

In addition to its great environmental value, *Grota dos Andorinhões* (cave of the big swallows) is also a natural chapel that can favor meditation

symbolic arch. The joints between the rocks are so perfect that it looks like they will last an eternity. “It does not need maintenance,” Régis assures us, backed up by his 10 years experience at the Reserva. Multitasking, confident and reliable, he reflects the profile of the Reserva’s employees. “He is a talent! He is passionate about this place. He started at the warehouse and is a successful case of upward mobility: today he is on top of everything here!” compliments Raquel Pazos. Along the way, we found Antônio Rosa, an old resident of the region and one of the first employees of the Reserva. Smiling and supportive, he is known as the monkeys’ friend. For those interested in chatting, he is definitely the guy. Sooner than later, he will be talking about the time when everything around here was filled with monotonous pastures. “Today there is the beauty of the forest and the animals. I see wolves, pumas, monkeys, and lizards. The *Jacu* (dusky-legged gaun) also increased their presence here. What is less seen here now is the armadillo because



Garnet, the highest point of the Reserva; Crude Awakening, the set of surprising sculptures by Karen Cusolito, and the *Árvore dos Sete Cavaleiros* (Tree of the Seven Cowboys), inside which, according to the legend, seven men found shelter

Some of the flora species identified by Viagem. The rocky arch, a kind of "Land Art" style by Régis, and the modest waterfall he "discovered"

there are more predators. As for the pumas, if they have cubs, you had better not get close. But otherwise they do not attack us. My only worry is the drought... one has to be on watch for the smoke. People start most of the fires when the grass is tall. Don't they see that they are harming themselves?," Antônio asks.

Ibitipoca has one of the richest soils in quartzite (white mineral that conducts electricity) in the world. Hence, it is also one of the regions with the highest incidence of lightning in Brazil. In addition to this fact, the long drought season and people's dangerous habit of burning the pastures make the area very susceptible to wildfires. Marciano Júnior (Chinha), a former employee of the Reserva, member of the fire brigade, trail guide and an lodge owner, helped to put out many fires and now sees the return of the animals with pride. "I opened my own business because I trust the potential of the Reserva and the park," he says. Coming from a traditional family, the Fortes, Chinha defends the environmental heritage of Ibitipoca as if it were his own backyard. "We cannot allow this place to lose its shine! Conservation and safety should always come first!"

ALONG VIAGEM'S STEPS

The silence heard when you're trekking or biking increases the chances to observe birds, mammals and reptiles. It is even more intense if one follows the steps indicated by the late Ricardo Gomes, known as *Viagem* (Trip). As an enthusiastic botanist, he mapped species and confirmed the rich diversity of the Reserva. "He was loved by all and enjoyed passing along his knowledge," remembers Raquel, pointing to one of the trees he originally identified. *Viagem* is now the name of the pathway or road that goes to Mogol, an almost phantom village, and he can also be remembered every time we find a plant or a big tree properly classified.

Along the way, I also noticed small farmers still making a living from their lands. There are not many of them – quite a few preferred to live in the city – and the view of their places is as if frozen in time. Old little houses, chickens and ducks wandering around, wood logs piled up, a modest vegetable garden and cows at the corral. A calmness that reminds one of passages of Guimarães Rosa's books, a great Brazilian writer

and the first to open up the world behind the country side of Minas Gerais state. "Everything is the edge of a mystery, including the facts or their absence. Don't you believe me? When nothing happens there is a miracle we are not seeing," he wrote. But *'Dona'* Cidinha allowed us to see the hidden beauty in the hard work of a small farm... After crossing hills and woods, we can see a valley and, in the background, a typical house from the time of the Gold Cycle in Minas Gerais. Meticulously rehabbed, walls covered in old pictures and antique objects, the main house of Fazenda Boa Vista is one of the most significant visiting points in the Reserva. Built at least two centuries ago by the family of Maria Aparecida de Paula, i.e., *Dona* Cidinha, this house exudes history! There she lived with her parents until she eloped - a practice typical of a few daring farm girls - with Daniel, her beloved husband until today. While our group had plenty of rice, beans, sausage and green collards prepared on the wood stove, Cidinha would reminisce, punctuating each story with the unforgettable sound of her laughter. Raquel and Régis asked her to tell us more and

then we travelled in time, enjoying memories of parties, baths in the lake, dances around the fire and other forms of entertainment of the old days. "We had no TV but a lot of fun," she says. In spite of her stories, this superb cook does not feel attached to the past. She simply likes to tell these stories so as not to "lose her roots".

SNOW FOR THE EYES

Near the farm's main house, we find a new and important Reserva hub: three gigantic nurseries for sheltering birds and animals captured by Ibama, the government environmental agency. The place is the base for *Projeto Asas*, which provides an area for wild animals to be returned to their habitats. The project is a partnership between Ibama and the environmental NGO *Instituto Brasileiro de Proteção à Natureza (IBPN)*. Rogério Caldas, a forest engineer and president of the NGO explains that most of these animals are, in fact, birds, some of them still chicks, which are for the most part victims of trafficking: "They arrive stressed out and mistreated and in need of protection. This place is perfect because it is next to the best preserved



Under the omnipresent *Pedra do Gavião* (Hawk's Rock), *Casa do Benjamin* (Benjamin's house) is a reference in antique house restoration. Among the rare gems of the Reserva are Aroldo, our careful driver, and the cheerful José Vicente as well as Régis, an avid storyteller

The *Tumba* (tomb), work by the Chinese artist Zhang Huan, is in perfect harmony with the quartzite white ground. Raquel Pazos framed by a genuine adobe and wood wall. Cidinha and Daniel: the enamored couple

part of the park." Caldas is responsible for receiving and managing the fauna. "The rescued animals almost always require some time to recover and many need to learn how to survive; this is why we encourage the ones that are predators to hunt and we provide the same fruit they will find in the area. We also avoid their contact with human beings as much as possible. This interaction is dangerous: the animals cannot see hunters as friends". In 2016, the Reserva was among the one hundred areas authorized to release these animals back in the wild. The expectation is that the vinaceous-breasted amazon, an endangered species, may come to find refuge there. In addition, Rogério, who is also an environmentalist lawyer, awaits a positive answer from the legal authorities to reintroduce the big red-macaw to the area. It lived in this region until the 19th century. While the macaws have yet to return to populate the sky of Ibitipoca, hawks and the majestic king vulture remain dominant. The latter is called king because it can be intimidating, with a wingspan that approaches 6 ft and a noble plumage, somewhat contrastive to the epic scenario of

Areião, a place where the white of the ground can be mistaken for snow. Most of the soil in this and other parts of the Reserva contains millions of particles of quartzite rocks fragmented by time thus forming enormous white carpets. It was for the abundance of these grains, like sand, that the place was baptized *Areião* (big sand). José Vicente de Paula, an experienced woodsman and longtime resident, welcomed us: "I don't like cities. I like the animals and the calm we have here". This piece of the Reserva is really a synonym of tranquility: hammocks attached to 100-year-old *jabuticaba* trees invite to a *dolce far niente*. Alas the sunset was already casting the last sunrays, announcing that it was time to leave... Back on the bumpy road, under the same clear sky, we remembered the encounters and the stories of the day and then it hit me: what makes the Reserva so special is its people, who give it a soul.

A LIVE ORATORY

Our second day of tour presented us with more unforgettable surprises. Leaving *Engenho*, the *Pousada's* 'headquarters', we ventured north.

After 30 minutes climbing up a hill, the road took us into an old forest. When the electric car stopped, birds were singing and the rustle of leaves surrounded us. Taking a short trail we arrived at a true sanctuary, heart of this magical ecosystem: the tree of the Seven Cowboys. According to legend, inside its huge hollow trunk, an entire group of men on horseback found refuge during a storm. In this wooden vestibule, light penetrates through the gorgeous lace designed by the roots; the imposing solidity and generosity of this ancient tree involves us in a meditative atmosphere. The silence now 'speaks' eloquently for nature; I myself was speechless and continued walking quietly, in sincere devotion, through the a garden of bromeliads (*Jardim das Bromélias*). Then the density of the dark green treetops started to scatter and gradually a new landscape revealed itself while we strolled by a dreamy white trail – formed by the scattered quartzite –, accompanied by an incredible amount of orchids and bromeliads, a natural landscape that would honor Debret's art (himself a member of the French Artistic Mission, 1816).

This trail ends at Garnet, a mountaintop of almost 5,000 feet, where the human presence restricts itself to a ranch with a little table in a small kitchen with an amazing view. In a yard of wild flowers and low shrubs, two inviting swings attracted me like a magnet and for a while I became a child again. I allowed the wind to gently caress my face, while at the bottom I saw a deep valley with bald hills and the small village of Mogol. By the end of the day, fortune bestows upon us a new spectacle: going down to the Reserva's extreme south, we saw dozens of birds performing stunts up in the air. They suddenly swerved in a shallow angle by a narrow gorge, until finally disappearing in what seemed to be a cave. We followed them - they were the Biscutate Swift, known in Brazil as *taperuçude-coleira-falha* (*Streptoprocne biscutata*) – and found them hooking their claws tightly on the cave walls, as bats do. They spent the night by an idyllic underground waterfall. This species that feeds on insects looks like a big Swallow with a white collar. It is a migratory bird that makes Ibitipoca part of its annual route. It usually arrives in August and remains there



Centenary Jabuticaba trees grant shade to those in need of a break, in this beautiful location known as Areião (big sand)

until February. In honor of them, this cave-refuge is named *Gruta dos Andorinhões* (cave of the big swallows).

Soon after the cave, we found ourselves in front of the *Tumba* (tomb), a work of art of indelible whiteness. This work by the Chinese artist Zhang Huan reminds one of the sacredness of a temple. In China, one can still find the tradition of having dead people buried with their belongings. The tomb then is decorated with images of gods

like the Celestial Blue Dragon and the White Tiger. "Originally, an urn was used to save valuable objects. The artist's idea in 'exploding' its dimensions and showing an empty space is to state that the most valuable is not in things, that the most important asset is immaterial," says Marcello Leite Barbosa, curator of this work at the Reserva. Inspired by Buddhist wisdom, we left the emptiness, the silence and faced a magnificent sunset sky to complete our day.

CHOOSE YOUR ROUTE

There are many tours, most of which can be made by trekking, bike, electric car, or on horseback

HAWK'S ROCK – *The complete tour comprises roughly 9 miles and goes to the peak of Pedra do Gavião, where there is a view of the State Park, waterfalls and the main house of Fazenda do Engenho, besides villages, valleys and mountains. On the way there, one will find the Seven Cowboys Tree, the Bromeliad Garden and the Cave of the Rising Sun.*

ART CIRCUIT – *This new route is less than 5 miles, and includes the works Lost in the Wind, by Max Tolentino, cows from the CowParade, the welding sculptures by Karen Cusolito and the Wind House, a recent installation by Cornelia Konrads.*

CAVE OF THE BIG SWALLOWS – *There are beautiful stretches of forest along this trail. There are places of white sand, plenty of cacti and the gorgeous Gruta dos Andorinhões (it closes at the time when the birds, the 'big swallows', go to sleep). The tour may include the Museu (an antique house).*

BOA VISTA (Good View) – *The trajectory of about 10,5 miles takes you to an old farm, where you can enjoy a home style luncheon. On the way back, there is a view of the sunset from Garnet (at a mountaintop).*

RAFTING AT RIO SALTO (Salto River) – *The rafting of 1,2 mile is only possible after hard rain.*

DOWNWARD AT SWALLOWS CANYON – *Fun adventure that can last up to four hours of climbing down the canyons by swimming, sledding, going up and down rocks and passing by a submerse cave.*

WATERS CIRCUIT – *This refers to a hike in the forest at the margin of Salto River on a downward slope from the state park (PEIb). Along the path of about 5 miles, there are many opportunities to freshen up: Lago Negro (Black Lake), and three waterfalls (Engenho, Gritador and Lage), in addition to small ponds, ideal for bathing.*

MOGOL HAMLET – *The complete tour entails a bit more than 9 miles through valleys and mountains to the small village that has maintained its original features.*

CLIMB/WALK GOLDEN SHELL – *This is an alternative (and exciting) route by the rocks of Salto River to reach its natural swimming pools.*

ARRIVAL OF BIG SWALLOWS – *Between October and November it is possible to watch the spectacle of the birds entering the cave at sunset.*

PARK'S SURROUNDINGS – *The 34 miles path surrounding the state park also encompasses big extensions of forest and natural rocky walls filled with waterfalls. It is possible to have lunch at Fazenda Boa Vista and then venture on to Areião. On the way there is Project ASAS, the wild birds and animal's nursery, Mata do Luna (where the muriquis live) and Cachoeira Sete Quedas (a waterfall) and the Moreiras community.*

IBITIPOCA STATE PARK – *Inside the park there are three classic tours of its own: Pico do Pião, Janela do Céu and Circuito das Águas (Water Circuit). Even though these spots are next to the Reserva, the place has a distinct landscape. A must see!*





There is nothing like an 'x-ray' view to give a better idea of this project's dimensions. It currently covers more than 15 square miles



ATTRACTIONS

- Architecture
- Art
- Panorama
- Water
- Fauna
- Flora
- Geology

RESERVA DO IBITIPOCA*
(Nature Reserve)

SUPERLATIVE CONSERVATION

1. Fazenda do Engenho (lodge)
2. Bay, gardens and little farm
3. Wind House (art work)
4. Areias
5. Gruta dos Andorinhões (cave)
6. Tomb (art work)
7. Lago do Fernandinho (lake)
8. Museum
9. Pamonan
10. Arraial do Mogol (village)
11. Fazenda Viradouro (farm)
12. Prainha (river beach)
13. Lago Negro (lake)
14. Gritador Waterfall
15. Mirante do Macaco (viewpoint)
16. Piscinas (pools)
17. Limeiras (lemon trees)
18. Zico & Benjamin
19. Tatu Sentado (sculptures)
20. Pedra do Gavião (boulder)
21. Seven Knights Tree
22. Rancho do Garnet (ranch)
23. Bromeliads garden
24. Eagle's Nest
25. Patuá Waterfall
26. Patuá
27. Fazenda Boa Vista (farm)
28. Nurseries
29. Fazenda do Areião (farm)
30. Mata do Luna (Muriquis)
31. Sete Quedas (waterfall)

PARQUE ESTADUAL DO IBITIPOCA
(State Park)

*The purple areas on the map are not part of the Reserva

ART

PERSPIRATION



KAREN CUSOLITO created many installations of public art in the Boston area until she moved to San Francisco, in 1996. Regarding the strong presence of body shapes in her art, she comments: "The human form is a rich arena in which to explore and to express emotion, intention and challenge". Most of her work focuses on humanity and the environment and "the delicate balance between the two". Cusolito's petite frame of 5'4" and 105lbs challenges stereotypes. She expertly manages all the welding machinery equipped with a protective helmet, positioning herself many feet up from the ground. Still, she seems in perfect (and delicate) balance: "When working on that scale, it is really important to remember to stop working, get down on the ground, walk fifty feet away, turn around and see the whole context and how everything is developing together".



Karen Cusolito's sculptures in their reverential posture of humility, prayer, joy, enlightenment, peace and rapture carry on a message: we are indeleibly connected to the Earth

SELMA VITAL

X INSPIRATION



Integrated to a new, magnificent landscape, the gigantic art set composed of seven human figures—ranging in weight from 4 to 6 tons with some reaching 30 feet in height -- are iconic of the Reserva's philosophy. They were installed at *Pedra do Tatu*, a spot that affords the viewer beautiful sunsets and adds a spectacular aura to the whole experience. However, when the visitors place their eyes on the pieces of welded art, they witness only the results of a long trail of inspiration, movement and perspiration.

Totalling about 84 tons shaped in astonishing dimensions, the sculptures required specialized

Project manager) trying to keep everything moving forward. We made rain jackets out of garbage bags and at the end of each day I dried my boots, gloves and jeans above the fire," Cusolito recalls.

At one point the adventure involved riding in a boom lift pulled by a tractor and pushed by a front end loader. "The road was very narrow and the drop off at the edge was very steep. It was terrifying!" Even with all the setbacks, all this turmoil faded away and the feelings the sculptures now evoke in viewers are ones of peace and reverence, almost meditative, giving us the impression that they are in their natural habitat.

and that she had given them my business card. Weeks later, I received an email from Reserva do Ibitipoca informing me of the project and inviting me to go visit and experience it. I read the email and was overjoyed. It all sounded so magical and perfect!" she remembers. Even so, she did not reply to it immediately. "It took me more than a month to respond because I was very nervous. Ultimately, we communicated and arranged my visit in February of 2012."

The preparation for her visit is probably the funniest part of the story. "My friends insisted that I bring a gun – or a body guard. They were

and an environment I had never experienced. Add that to the stunning and healthy landscape, and the joyful and easy-going staff, and I was certain I had found heaven on Earth," Cusolito summarizes. Besides the visit to the Reserva, the trip included a tour that took Cusolito and Michelle to see some of the scrap metal warehouses in Rio de Janeiro. "I felt right at home!" she says "And I have to say the scrap metal warehouses in Rio are much better organized than those here in the U.S," she adds. Created primarily from salvaged and repurposed material, leftovers from structures of demolished buildings, the sculptures seem to emulate an



transportation to navigate a path from California to the interior of Brazil. "The installation was an epic undertaking," remembers Cusolito, "starting with shipping them out of Oakland to putting the final bolt in place, it is certainly the most memorable installations of my life." It's worth noting that she has exhibited each of these pieces many times and considered them rather easy to install. That is, until she had to install them on top of a hill in the rainforest in Brazil under the rain. "The trucks that were bringing the sculptures got stuck when the rain washed out the road... and the whole thing became a circus: heavy equipment sliding down the hill, Margaret, my assistant and I and the crane operator ducking into the mountain house, waiting for the rain to stop, and poor Brittany (the Reserva's

"The sculptures were created in a very hard, gritty and industrial neighborhood in Oakland, California. Now they are surrounded by crazy parrots, monkeys, beautiful landscape and an amazing community of people. I cannot imagine a better home for 'the kids', as I call them, than the Reserva where there is such a strong commitment to nature and support to a healthy environment," she reflects.

TOO GOOD TO BE TRUE

If you think this trip was the most amazing part of the story, wait until you learn from Cusolito herself what happened before the sculptures' arrival in Brazil. "Sometime in September, 2011, my manager Sally told me someone had stopped by my studio and inquired about the sculptures,

suspicious that it was a set up because it seemed too good to be true, and that I was going to be kidnapped. 'No one plants the rainforest, or teaches people for free, or buys land and doesn't develop it,' they said. Her reasoning was simple: "Who would kidnap an artist? Artists are generally very poor so no one would ever pay a ransom for an artist! So, it was decided I would bring my friend Michelle with me. She can be as dangerous as a gun," jokes Cusolito. The visit did the trick:

"I cannot describe the joy I felt when I saw the Reserva for the first time, and every time since. The lush forest, being given again the chance to grow and take back the earth, the clear and abundant water pouring from hillsides and in the riverbed, the perpetually laughing parrots, it was a paradise

environmental message in and of themselves. So we asked Cusolito if the choice of material had any particular, implicit message or if she was trying only to imprint the pieces with a more industrial look. "Both," she told us, then she gets serious: "The industry in the United States is disappearing. More and more imports mean fewer and fewer jobs here, and our tools, warehouses and industry, in general, are disappearing. Warehouses are being turned into condos, manufacturing jobs are going overseas and the tech industry is turning the rest of our work force into desk jockeys. Our tools are being melted as scrap metal. Beautiful, ornate vintage tools, that had been used to make things, to build our bridges, roads and buildings, are being sent overseas to be melted down!" she regrets.

Rustic but comfortable, the constructions at Reserva harbor a wealth of stories

CROOKED IS RIGHT

A restored adobe and wood house, at Areião

SEE THE VIDEO



“When you are simple, you allow love and beauty to walk into your place”, philosophizes Hélio Pellegrino, an architect who has consistently been a collaborating partner in Reserva projects. For him, this place is “a transcendental experience” related to truly human relationships, the use of recycled material (“objects marked by life”) and the recovery of nature. “Allowing the grass to grow freely is a political act; it is as if the grass were us”, he says. “If the world

were a Reserva, we would be full of beauty, harmony and love.” Asked about his participation in the design of the Reserva buildings, Pellegrino answers is given with a poetic note: “I only helped to compose the symphony”. In fact, many people joined this orchestra to participate in every step from the architectural to the interior design, landscaping, lighting and artistic interventions, all that makes Reserva do Ibitipoca a special place. “The result

is a sum, a multiplicity that comes from the input of many”, summarizes Raquel Pazos, who followed each phase of the various construction projects. The key note, however, which sustains the Reserva engineering choreography is sustainability. In almost all the renovations and constructions, there are solar energy panels, water reuse and ecological wastewater treatment systems. The recyclable waste is sorted and the organic residues are given to pigs, chickens,

and used for humus compost. Once the prestigious architect, Hitech Mehta, learned about this, he picked the Reserva as a case study about architectural recovery and sustainability and described it in one of his books. The architect, who has already visited 46 countries and produced the “ecological lodges bible”, says that the Reserva is actually a reference in conservation and hospitality projects in Brazil. He visited the locale as National Geographic guest, in response

to a request for the site’s assessment for the program Unique Ecolodges of the World. Mehta spent a few more days in the Reserva, getting to know more and taking photos to include it in *Authentic Ecolodges – Volume 2*: “I selected it because it fulfills the criteria I created along the years.” In his book, he classifies ecolodges as “forms of lodging that integrate themselves in a harmonious way into the natural and cultural environment and offer memorable experiences

while protecting the environment and the local community”. One of the buildings that attracted Mehta’s attention the most was Viradouro, a house built in 1750. Luiz Antônio Campos, also known as Tziu, translated into rock, wood, and cement the dreams of the Reserva’s idealizers when he renovated this old residence. “Since the beginning the intention was to preserve colonial architecture values”, says the architect. The historical



Adobe and wood ranch at Areião, which now functions as a cafeteria

ambiance was also kept in all renovations and improvements. The construction workers, all of whom reside in the region, found this “new-old” style strange. Mr. Neovander Almeida de Paula, known as Vander, remembers: “A construction co-worker, who was used to doing everything very straight and by the book, didn’t like it. He wanted to leave. Things were not supposed to be smooth.” In the beginning, he himself felt weird about it, it seemed the finishing was ugly. “They explained it to us and we kept doing it as they wanted. And when we saw how it was decorated, everything made sense.” It is interesting to realize how

the team ended up as real perfectionists in search of imperfection; even tools were created to produce the right finishing. Mr. Joaquim Delfino de Oliveira Neto understood the logic of the architectural style: “crooked has to be just right.” The result of such preciousness? Nothing modern can be seen: rocks below and plastering on the walls cover everything. Mr. Gaspar dos Reis joined the team and helped to erect the walls of the Pousada (lodge). “I’m always learning; now we are using rocks to build a wall the way we were no longer used to do, hiding the mortar between the rocks. It looks nice, it seems

the work is only a matter of fitting them together. I like to do things well, something made to last!” Another enthusiast about this old-new way of building is Mr. Domingos Alves de Oliveira, who comes from a time when mud-and-straw houses were common; “We would have a mutirão (a joint effort group) to build a house and the owner would offer the workers food and cachaça” (sugar cane liquor), he remembers. As the masonry system became popular, the tradition was lost – he could never have imagined that he would raise a mud-and-straw wall again!

OLD-NEW STYLE

NO GOLD LEFT Even though Ibitipoca was one of the first regions to be part of the so-called Gold Cycle in Minas Gerais, the mining activities there were short-lived and soon the adventurers relocated to more promising sites within the state. By the beginning of the 19th century, a hundred years after the discovery of the mines in Ouro Preto, the region was given new life as part of a route of traders and cattle dealers on their way to Rio de Janeiro. The architectural legacy however is not reminiscent of the opulence of rich landlords but of the peasants’ and workers’ simplicity. The architecture from this period is of a rustic style: walls in adobe and wood with thatched roofs. This was the rule even during the Coffee Cycle that made richer other parts of Minas Gerais. The rocky formations and sandy soil were a restraint to big economic enterprise and the mountains were used for cattle-raising.

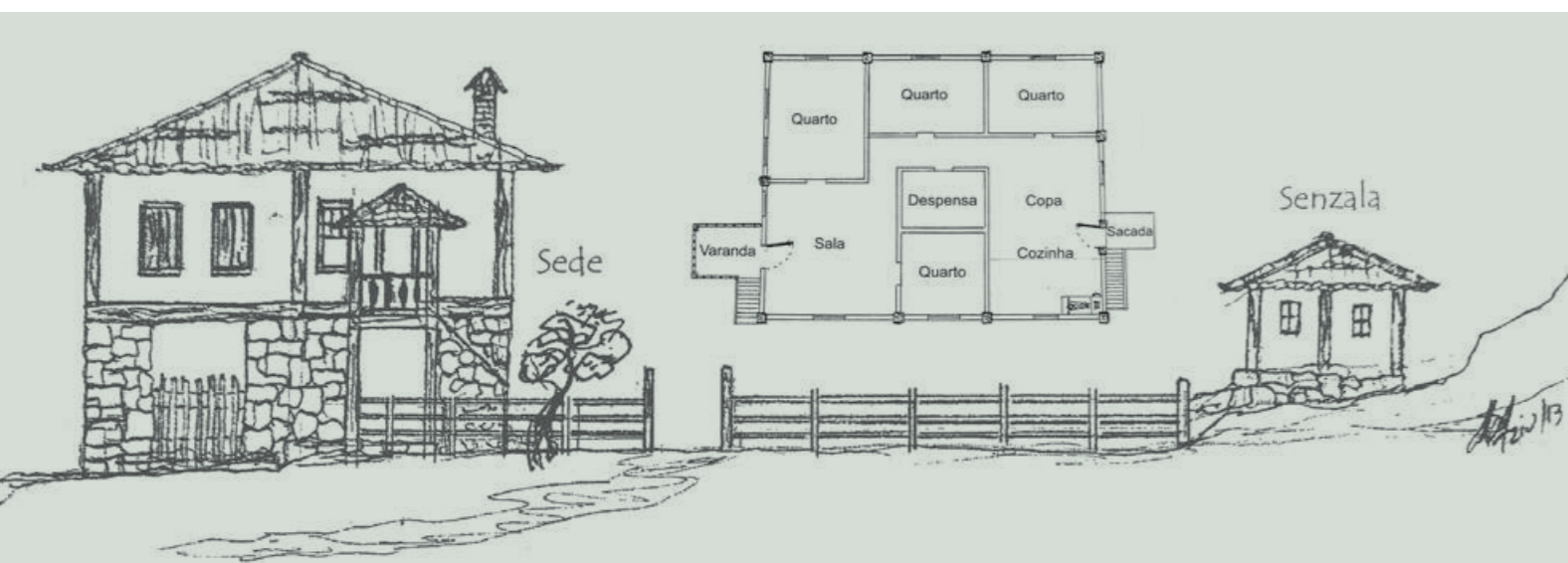


The colored glass windows seen in many buildings at Reserva are a poetic touch to the landscape

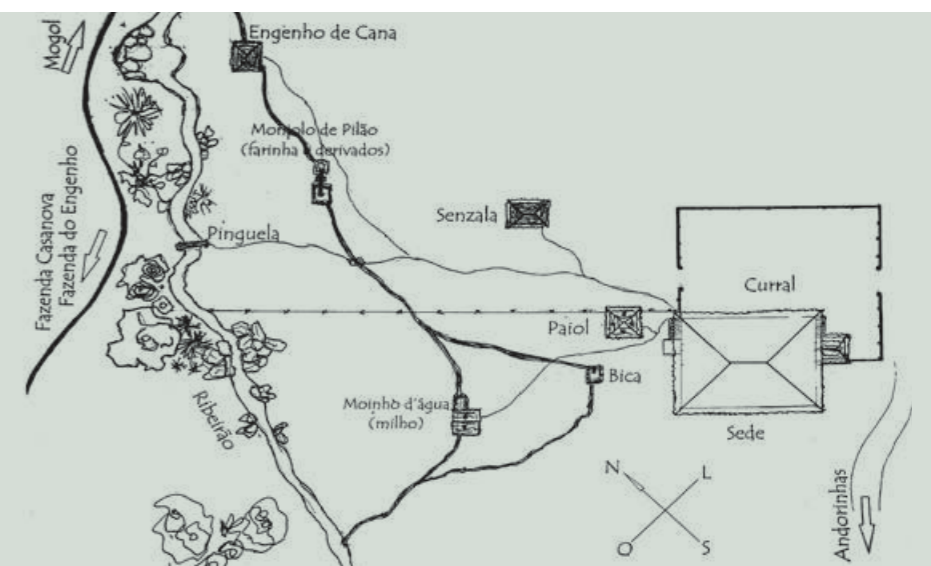
The main house of Reserva do Ibitipoca has its story to tell, too. It was built exactly on the spot of the former Fazenda do Engenho farm house, with land and buildings on it acquired by Carlinhos Repetto in 1981, when the Reserva began. The estate mixed mud-and-straw, bricks, masonry and some joy to it all. Tziu, the architect himself who has been around the legendary farm house since he was 17 years old, says: “Here I built my first house and acquired a new family, the Ibitipoca community.” “Carlinhos’ farm was so plenty of personality, so mythical! With its parties and meetings it became part of many people’s stories.

This is why I was so afraid to tear down such an affective heritage”, says Rogério Mascarenhas, o Rubão. One of his goals when rebuilding the main house was to make sure to keep “the old house atmosphere”; then, the large corner porch, trade mark of the farm, became one of the axes of the architectural project. The “L” shape of the original blue print had its arms expanded to create the wing for the rooms, living room, kitchen and the inner courtyard. “The porch is the meeting point of the two projects”, summarizes Rubão, who followed the orientation given by Lilina Repetto, an experienced architect who is also

Carlinhos’ mother. After the reconstruction, the house looks like an antique. A good amount of the material used in it comes from demolition: there are artisanal roof tiles (handcrafted by slaves), windows, rocks and door frames. In addition, the interior design was made with objects that are full of stories, too. Rubão explains that one of the challenges was to find enamelled electric switches and porcelain outlets: “The task was accomplished with honors by



“COMPOSITE SKETCH” As part of the process of recovery of historical constructions, in a meticulous work of architectural archeology, Tziu found pieces of the old structure and the foundation of the main house of Fazenda do Gavião Maior, one of the first houses in the region. From that, he drew a sketch that will eventually serve as a guide for its reconstruction.



CULTURAL HERITAGE: FROM THE STONY FOUNDATIONS TO THE ROOF TILES

All the building, restoration and maintenance of the houses at Reserva do Ibitipoca is done with a view to maintaining the architectural features of the colonial style of Minas Gerais, its local culture and history



POUSADA (Lodge) – The house was erected in 2008 from mainly recycled demolition materials (mostly taken from the surrounding area). Traditional building techniques were employed. The veranda was inspired in the former main house of Fazenda do Engenho.



VIRADOURO – This is the oldest building in the Reserva area (1750). It was rehabbed and expanded preserving the original architectural style. Today it is a sustainable house, maintained with 100% renewable energy.



CASA DO BENJAMIN – Just like Casa do Zico, this house had the exterior appearance preserved while the interior was modified to enlarge its tiny rooms. The house painting is soil-based: naturally pigmented material called oca.



SPA – This construction used to be the farm's barn. It was demolished and rebuilt with the same material (stone and wood) and transformed into a therapies center.



BOA VISTA – The structure of this early 19th century house was strengthened and it received a new porch and some functional updates. Everything was with architectural preservation in mind.



CASA DO LUNA – Built in 2016, this house features a hybrid technique. It mixes stone and recycled oversized bricks. It is located at the entrance of Mata do Luna and serves as lodging for visiting researchers.



RANCHO DO AREIÃO – This ranch in adobe, wood and no plastering was rehabbed and updated to enhance the landscape. Currently, it is used for open-air meals.



GARNET – A single room in wood ranch style featuring an astounding view. The bathroom is a separate small construction with one of its walls missing to overlook the landscape.



CASA DO CARLINHOS – This building belonged to the original Fazenda do Engenho owner and is still named after him. It is a three-bedroom house, suited to accommodate families and groups.

Marlene: "The interior designer Marlene Zanini spent five years 'mining' tiles, colored glass, bathtubs and many other pieces in antique shops and century old farms to give soul to the Pousada. Habitué of Ibitipoca for about 30 years, she showcased her love for the region in each detail, searching for the perfect door knob for a bathroom or the ideal objects to compose the kitchen.

It was her idea, for example, to employ the French style that resembles the animated film Ratatouille. She ordered classic black and white tiles to achieve this effect. Another result of her search is the collection of cachaças, selected from different corners of Minas Gerais state. The collection now occupies one of the walls of the inner courtyard. Many pieces of furniture, like a cabinet from an old pharmacy, regained life and added personality to the house. "There is a miscellaneous collection of objects from different eras", says the designer who added enchantment and harmony to the whole 'body of work'. "It was the best work

I have ever done because everybody gave their best." Each object of the Pousada has, after all, a story. The altar, for example, was white. When it was being refurbished, it revealed a range of colors. Cacaio Souza, visual artist and restorer, discovered this effect. "I realized that probably there was a floral painting underneath that was typical of the time. I scratched the side of the piece and the original painting was there. It took me 10 months to meticulously remove all the layers with a scalpel." In partnership with Marlene, Cacaio restored and gave an aged tone to many pieces, like the floral wall panels and skirting-boards as well as the reproductions of works by Rugendas (German artist, 1802-1852, author of Voyage Pittoresque dans le Brésil). "I already had experience restauring churches and producing panels, but reproducing is very different from creating. Painting à la Rugendas was a challenge: I had to search the colors to approximate the tones of his paintings and this revealed itself to be more difficult than creating something from

scratch because the responsibility is greater." The artist also painted the Reserva's logotype and the topographic map of the area as an oil on canvas.

Today those entering the Pousada can feel the charm of an old house – without the museum atmosphere! Colors and light and a joyful simplicity give a modern tone to the design. To achieve that required the lighting by the award-winning designer Maneco Quinderé and the summery touch by Mucki Skowronski, the visual artist who made the embroidered panels and the upholstery. Her pieces are delicate and always inspired by nature. "I hope to provide the guests with beauty, lightness and well-being. Ibitipoca is a very dear and special place where I feel at home. Since the beginning of the Pousada's decoration she has participated in it. She imprinted her style on other buildings too, like the Garnet. Every year she comes back to suggest updates on the interior design:

"I rearrange objects, reuse a curtain, sew another one; I follow the principle of re-purposing"

Casa do Benjamin with Pico do Gavião in the background



Generating income and creating jobs for the local community:
this is how Reserva do Ibitipoca projects are boosted

LET'S GO TO WORK

SEE THE VIDEO



“One plus one is always more than two” is a verse in a Brazilian song, *O sal da Terra* (Salt of the Earth), by Beto Guedes. “To better join our forces all you have to do is better share the bread”, it goes on. This song, almost a hymn in praise of ecological awareness, was composed in 1981 but its chorus still resonates with our sensibility: “Peace on Earth, love, feel the earth under your feet...” It has a strong poetic appeal for us to take care of our planet and commit to social and environmental causes. It also illustrates the principles of Reserva do Ibitipoca. “The Reserva will be really sustainable when it becomes economically so! When entrepreneurs generate income that affords a decent living for the local population and the continuity of the Project as a whole”, states Raquel Pazos, manager of the Reserva. She says that the focus now is on the selection of the entrepreneurs for the food production. The *Projeto Empreendedorismo* (Entrepreneurship Project), coordinated by her,

translates into people planting, harvesting, and transforming sugar cane into molasses, corn grains into meal; cultivating mushrooms, raising bees; trading their products and services. The first initiative in this sense happened in 2015, she explains, when it was decided that there should be a lodge. It opened in 2009, for workers of the local community. People enchanted by the lodge sometimes think that the Reserva is only an extension of it. It is rather quite the opposite: the lodge belongs to the larger Reserva endeavor! The forest can hardly be a source of income and jobs, a fact which, unseen to, would cause people to leave. In order to find the balance in this man-nature-and-economic-activity relationship happening inside an environmental reserve, the alternative was to bet on low impact tourism. Instead of building a hotel with 100 more affordable apartments, the option was to build an lodge with 12 very fine accommodations that could

attract the attention of international tourists too. Beyond infrastructure, the enterprise demanded a well-trained team. Interestingly, instead of importing experienced staff from the luxury hotel business, locals were hired. Training these people to provide tourism services became Pazos’s challenge and specialty. She tells us that valuing the employees has been their major priority. Today there are 45 people working at Reserva and 30 people at the lodge (indirect labor excluded). The work force is predominantly local and most of them live in São José dos Lopes. This village of less than 300 inhabitants, located 12 kilometers away from the *Pousada* (lodge), soon felt the positive impact of tourism, which until then had been supplied with workforce from Conceição do Ibitipoca, as most lodges are located on the way to the state park. Even those residents indirectly connected to the Reserva but interested in trading their production are invited to increase the number of items offered

at the *Pousada*. Today, a variety of fresh vegetables, homemade sweets, typical regional food (*comida mineira*, prepared on the wood-burning stove) and even the traditional *cachaça Me Leva*, made in a town called Andrelândia, are served. The French chef in charge, Claude Troisgros, who has lived in Brazil for many years, decided to use French techniques in local produce. “This place inspired me. It was exciting to get to know the community of small producers, from the family that makes soap to the one that produces guava paste and raises pigs. So, I created the dinner menu and trained Marly, who was able to learn everything I passed on to her. She is a self-taught talent who can season food in simple and yet remarkable, extraordinary ways. Besides, she loves this land and translated her love into her recipes. She adds love to all she makes – and this is a fundamental feature in any kitchen.” According to Troisgros, hospitality and cooking can improve (and sometimes

even transform) the life of a community. “People who live far away from the big urban centers are often unaware of how they can transform the incredible ingredients they have at hand into a delicacy. These products are part of their daily life and with the arrival of a hotel like this, they start to understand and to value their local produce; they realize that, with these ingredients, they can go beyond what they were used to.” The artisanal distillery of Edmar Geovani Gonçalves, in the northwest of the park, illustrates this reality well. Recently, with the help of his son, Bruno, he started to produce *cachaça* and, in one year, the sugar cane harvested in his own land yielded almost 3 thousand liters of the spirit! As part of the Entrepreneurship Project there is also the harvest of *juçuí* (fruit of a palm tree threatened with extinction). The work is coordinated by Diogo Jorge, who is responsible for the agroforestry development and implementation. He is having talks with a shiitake

culture expert and has already recruited the help of Luiz Manoel dos Santos, a connoisseur of flours. Santos is from Paraíba, a state in the Northeast of the country, where the manioc flour is part of the community tradition. “People used to get together to prepare it in the old days”, he says. On the wood-burning stove, they now prepare 10 kilograms of manioc flour a day, but hopes that, after the building of an oven, this number will increase to 25 kg daily. Yes, pretty soon the saucepans and pots will multiply and the Project will include the *Oficina de Cosméticos e Essências* (a workshop of cosmetics and essences), the *Casa da Farinha* (literally, house of flour) and the *Casa de Doces* (house of sweets). For this last part, there is an expert in the production of artisanal foods, Ms. Odete Maria. A strong woman with peaceful eyes, she knows the exact time needed to prepare perfect jellies and jams. In her magic caldron, she works with bubbling liquids until they become sweet delicacies. “My mom



always dealt with molasses and syrup. Diogo taught me how to make the sugar and it is much more pleasant making it all yourself than buying from a store." Encouraging cultural tradition is another facet of Reserva's relationship with the community, as in the incentive to the band *Nova Aurora de Olaria* (Olaria's New Dawn). In many festive occasions, the band is invited to play for lodge guests. "It is always very good to play at the Reserva: applause is our fuel," says José Alves de Souza, also known as Menestrel. He teaches 52 youth from 10 to 17 years old from the neighboring village. They learned how to play various types of music and, according to Menestrel, they improved their grades at school. "Music increases their concentration power," he assures.

GROSS LOCAL HAPPINESS

As part of the process of adopting sustainability as a principle, three *Pousada* employees who have shown an entrepreneur's vision and leadership have now

become partners. Junior Vicente dos Reis, Marly de Fátima and Reginaldo Fagundes can be joined by more *Pousada* employees, because other members of the staff showing the same merits may eventually be part of it, too. "The fact that they manage a lodge of this scale is already a case of success that we expect to replicate in other areas," says Pazos. This experience called the attention of Pace University, in New York City, and it was chosen as its case study. Casey Frid and Imram Chowdhury believe this to be a special case that should be discussed with their students in the classroom. In visits to the Reserva as well as to the villages of Lopes and Conceição do Ibitipoca, they understood the whole process on the spot: "We saw the challenges they are facing and overcoming. This is an incredible way to expand their social network. Capitalism is in crisis everywhere and our students search for models that include social and economic aspects. They want to see alternatives for developing countries," Frid

explains. The professor's optimism is evident when he adds that "one's got to dream; and if our students get to know this example and then feel encouraged by it, we'll have done our work." More than simply generating income, the Reserva seeks to cultivate happiness: "One cannot work solely focusing on the economic aspect – the social aspect has to be taken into account. Nor can we work on the social issue without talking about happiness" states categorically Nadja Hofmann, a German who studied at University College Roosevelt in the Netherlands. This young woman is measuring, through survey methods, the rate of happiness among the employees of the Reserva. "I would say people working here are happy. I see them working hard, giving their best for many hours and days, and that would not be possible if they did not like what they do. This is something guests can sense; they comment that the staff 'makes the difference', that 'they like to

THE POUSADA PARTNERS

JUNIOR VICENTE DOS REIS, aka Juninho, served his compulsory time in the Brazilian military service in the Juiz de Fora headquarters, he then worked in a gas station and, finally, he was a truck driver. For the past 5 years he has been a Reserva employee, starting with a shuttle service for tourists to and from the airport and soon identified with the guides' work. "I first learned with them, then I took a course at the Park. Here we do a bit of everything – if needed, we even fry the manioc roots! A radical sports aficionado, he likes to take tourists down to the river, hike in the woods and walk up the highest hills. His most thrilling experience, however, was not at the edge of a cliff or in the depths of a cave, but crossing the state line of Minas Gerais! He had never set feet in another state when he decided to travel abroad, to California, to learn English. The opportunity came with the invitation by artist Karen Cusolito, who set up the majestic installation of a welded metal family at the Reserva. During her stay there, she became Juninho's friend. "This Reserva is a unique experience for me and for the region," he summarizes with a smile.

MARLY DE FÁTIMA Marly left home when she was only 8 years old to work as a nanny in Juiz de Fora. When she was 12, she went back to her hometown, Lopes, to help her sick mother take care of her younger brothers and sisters. She married at 16 and had a daughter. Used to working hard, she applied for a position in the kitchen of the *Pousada*. Raquel Pazos, the manager, received her with a challenge: on that same day she had to prepare lunch for a group of people: "I was afraid they would not like my food, but Renato complimented it and I felt na immense relief!", Marly (center at the photo) remembers. Since then, she has been part of the team – and now a decade has passed. Another remarkable moment was her internship in the restaurant of Claude Troisgros, when she needed to present a new dish each day: "I was so nervous that I cried a lot! I had never been to Rio, neither knew the majority of the ingredients." Now chef at the *Pousada*, she nurtures yet another dream: to open a restaurant with two of her colleagues, and call it *Os três porquinhos* (The Three Little Pigs).

REGINALDO FAGUNDES, aka Régis, is in charge of Maintenance/Construction. "He is a talent! He is passionate about what we have here. He started as a janitor and well illustrates the idea of upward mobility; today he masters it all!" praises Pazos. Jack of all trades, self-confident and reliable, Régis symbolizes the profile of Reserva employees. Rodrigo Londres, a former guest and nowadays a friend of all at the *Pousada*, has to add that : "He and Renato understand each other because they share the same drive for doing things. One dreams, the other makes it a reality".





A VIABLE MODEL

We asked Pace University researchers, Casey Frid (yellow T-shirt) and Imran Chowdhury, about what the importance of a study about the Reserva's sustainability might be.

FRID – *There are two reasons for this case to be really important for the students. First, one looks to the act of creating a business under the perspective of its process; most of what is taught in a business school is about planning – one must predict what is going to happen in the future, to trace a plan and then to execute this plan. But what is interesting here is that you have the case of an individual – Renato – who is essentially moved by experiences, by the process of making a hypothesis. For example: “let’s test the Pousada’s menu”, see if this works and obtain the feedback, first, from friends, relatives and colleagues, and only afterwards, apply it to the guests. Such a process is implemented with the meals, with room decorations, with the design of the spaces... There is a lot being tested and gradually improved. I think this is a peculiar, unique way to start a business – essentially different from what has been taught in business schools. This takes us to an even more relevant issue to the students: the creation of a system that is not based on the obligation of a financial return in the short or medium term, a crucial factor in traditional business. There is a good margin of maneuver and considerable impetus of the entrepreneur to provide to the employees (many of them being locals, from neighboring villages,) enough time to learn and practice the art of offering the best possible service to their clients in terms of cooking, hospitality, etc.*

CHOWDHURY – *This project is compelling; in a way it is idealistic and visionary in that we have this enormous natural reserve, this collective entrepreneurship, this transfer of power to the collaborators and all these unique things are happening. It is a kind of dream. A dream come true! And this is indeed the point here: Why not have a dream? Why not pursue it? If you succeed, even if only partially, you will be an example to the people, not only in Brazil but also overseas. If our students, for instance, see that this is happening somewhere, they can think: ‘Hey, maybe we can do that here. Maybe not in the same way, but in our own way, in our communities, in our businesses’. Then I hope that, writing our case study, we can help other people to see that this model is possible, and also to understand the challenges this kind of entrepreneurship is faced with. Maybe these people will feel encouraged to try something along these lines.*

LEARN MORE:

Happy presents recent discoveries in the areas of neuroscience, sociology, and psychology on happiness. Conceived and directed by Roko Belic, the documentary film features ways toward a more meaningful life and addresses questions like, ‘How can we build better spaces and worlds in which more conditions for happiness would be available?’ and ‘How can we cultivate our hearts and minds?’. The animation *The High Price of Materialism* challenges the model of consumerism that in now predominant all over the entire planet; and the book *Flow, the secret to happiness*, by Mihaly Csikszentmihalyi, points to alternatives for a better – and happier – world.

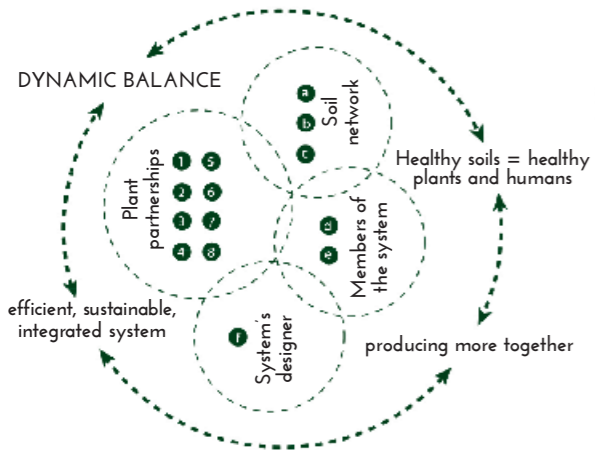
help, they like what they do and they love the Reserva project’. In my opinion, this is exactly what makes the project what it is.” But Nadja has also found that it is not always that the employees welcome what they were told to do: “In spite of having our own club here, exclusively for the Reserva people, with waterfalls and barbecue-roasting areas, most employees do not use it: on their days off, they prefer to be with their families.” From the collected data, Hofmann will then measure the rate of happiness -a concept created by the government of Bhutan and developed in the documentary *Happy* (2011). Curiously, she has been acting as a ‘guinea pig’ of her own research: “When my family asks me what I’m doing here, I ask myself the same question and realize the importance of happiness in my answer is considerable. I don’t know the precise reason, but I feel that this is what I want to do. I found something here that I haven’t seen anywhere else in the world. And I have travelled a lot!... I can only

describe it as happiness.” The informality of horizontal relations enchants the guests; here, each employee has a name, a history and a personality. Cláudia Baumgratz, marketing manager of the *Pousada*, believes this is a differential and the *Pousada’s* big attraction. “Ibitipoca is still a not so famous region in Brazil; overseas, very few have even heard of it”, she says. Baumgratz started to invest in attracting foreign visitors and noticed that they give more value to the essence of the place than to its luxury amenities. “There are wonderful hotels everywhere, but here one gets fascinated by the combination of services, which are offered by very simple people, coupled with all the socio-environmental dynamics of our projects.” A good example of how the relationships at the *Pousada* are generally marked by friendship and trust comes from Mr. Gaspar do Reis, a calm and soft-spoken man, who worked in the construction of the *Pousada’s* main office. There he met a young volunteer

from Tanzania who was in need of lodging. “I have a small room in my place”, he offered, displaying the typical Minas Gerais hospitality. The young African man accepted the offer and spent some time living in Mr. Reis household, in the village of Lopes. There he learned Portuguese from Mr. Reis’ daughter, Jacqueline, and in turn she was able to pick up a bit of English from him. She then became interested in speaking the language and until today they chat over the Internet. Interacting with people from other cultures played a role in Jackie’s career plans. “She was going to Juiz de Fora to study, but then decided to work at the *Pousada’s* Spa”, her father tells us. She is now able to teach Yoga in English! Jackie was one of the apprentices of Tasso Gomide: “She learned not only to take care of her own body – she now sees herself differently;” attests the yoga master and massage therapist of the Spa. “If it were not for the Reserva, all young people from Lopes would simply leave the area”, Mr. Reis ponders.



CHART OF A HEALTHY AGROFORESTRY SYSTEM



The nurturing FOREST

Agroecology is the link that reconciles human beings and the environment

With an intimidating machete in his hand, Diogo do Amaral Jorge trims a banana tree and cuts sugarcane with expertise. One would assume that he grew up in the country. In reality, he lived among the skyscrapers of the megalopolis São Paulo until the beginning of this decade. His arrival at the Reserva happened by chance. He was in the area looking for land to cultivate and found a parcel in the town of Lima Duarte, a place to 'seed' his ideas. After obtaining a Master's degree in Belgium, with a thesis on the inclusion of handicapped people in field planting, he was able to obtain support for the project *Nossa Horta* (Our Garden) via *Catarse*, a fundraising online platform for innovative ideas. The plan was to transform a vacant lot in town into a beautiful garden. And the change would be made by those who had been left out of the productive chain, like the students of APAE, a reputable Brazilian institution that assists people with Down Syndrome. The results exceeded expectations. They went beyond growing just food to harvesting happiness. While working on the land with this cheerful team, Diogo grew 'juçai' (a fruit from a critically endangered palm tree called *juçara*, which is even more nutritional and tastier than the famous *açaí*) and started looking for markets to sell his produce. It was then that the Reserva came into the picture to become his main client. A steady partnership was born. Diogo is a fan of "syntropic" agriculture, the most famous proponent

SEE THE VIDEO

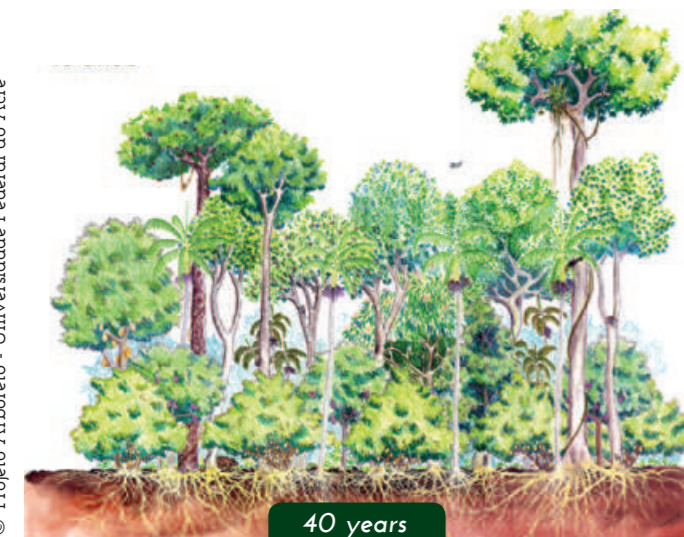


Diogo, in one of the pilot areas, among plants ranging from 8 to 18 months in age. The plants include pioneer trees (*Erythrina mulungu* and *guapuruvu*, a fast growing tree), fruit trees, secondary trees (like cedar, angelim wood or *caviúna*, a type of *Jacaranda*), shrubs (like manioc, *guandu* and castor beans), along with corn, bean, and sugarcane



© Raquel Ribeiro

Succession and Evolution of a bio diverse system



of which is Ernst Gotsch (see box). He explained the benefits of this farming system (food production, erosion contention, protection of water sources, and ecological corridors). Depending on the intended goal, there is a recommended mixture of species to be cultivated. The explanation was enough to convince the people at the Reserva to start a pilot project.

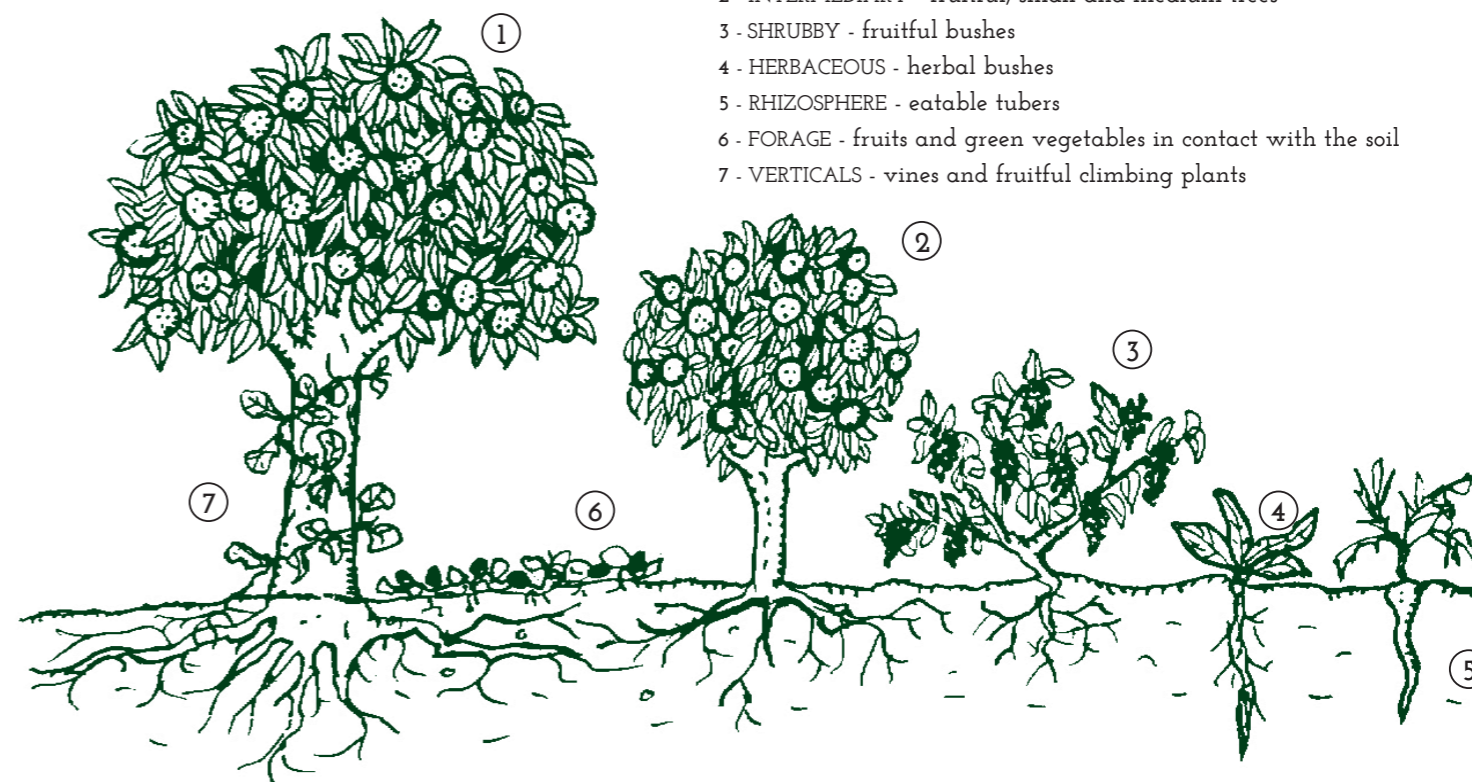
Implemented in 2014, the agroforestry system plantations have today from 8 to 10 species per square meter and the expectation is to elevate this number to 15 species. In nature, 40 species can be found in such a small area. Conventional agriculture, in contrast, will have one single species occupying several kilometers in extension. "Organics are not the solution; biodiversity is necessary," states Diogo. With a preference for local seedlings and plants, he planted over areas dominated by *brachiaria* grass (a species introduced in the area to create pasture land that inhibits the growth of native species). "Planting all these species together means you'll have plenty of everything. Some people argue that a mango tree starts producing only after ten years. Sure, but if we plant it every year, when the harvest seasons start, you are never short



SYNTROPIC AGRICULTURE: THE FOREST AS A MODEL

The Swiss farmer and researcher Ernst Gotsch (1948) began his studies of planting systems in Europe. While there he successfully grew a combination of wheat and peas as well as one of apples and cherries. He then lived for three years in Costa Rica, where he worked to recover the soils using the syntropic agriculture system. Arriving in Brazil in 1982, he settled at *Fugidos da Terra Seca* (Hideaway from the Dry Land), a farm in the South of Bahia state. That land is now called *Fazenda Olho D'Água* (Eye of the Water Farm) and produces an abundance of species in a large reforested area with plenty of creeks. Always anchored in a dynamics of planting and natural forest regeneration, Gotsch's techniques have been applied in different ecosystems around the world. "Human beings can reconcile with the planet: we think we are the only intelligent beings but we are an integral part of an intelligent system," Gotsch says.

Agroforestry system consortia



- 1 - CANOPY - tall fruit or nut trees
- 2 - INTERMEDIARY - fruitful, small and medium trees
- 3 - SHRUBBY - fruitful bushes
- 4 - HERBACEOUS - herbal bushes
- 5 - RHIZOSPHERE - eatable tubers
- 6 - FORAGE - fruits and green vegetables in contact with the soil
- 7 - VERTICALS - vines and fruitful climbing plants

of mangoes" he says, and continues: "There is a period of transition in which nobody will be harvesting enough to fill up a bag; it is going to be more like one potato for me, one *yuca* for you...but then comes the time of abundance". In 2016 there were two plantation areas, each with 5,000 square meters. Each year he plants an area. Next year, there will be three areas and then four and five. The first crop will be banana, then papaya, mango, and jackfruit, which seedlings are interspersed with the bananas. The agroforestry system is an essential part of the Reserva projects aimed at sustainability. "Being sustainable means to have people here, reforesting and producing food. It needs to be done collectively with the community participating in the management. It is not about having one supreme manager overlooking things. People have to feel like they own everything here. If they plant sugarcane they will take part of the molasses home to their families. And the women working here and helping plant the sweet potato will later use it to make preserve. We want to involve the entire community, so even if they keep their monoculture farming at home, they start getting more interested in the agroforestry plantations". Diogo believes in setting up a production management council that will be paid an additional amount besides the monthly salary, based on the plantation yield. This way they feel encouraged to increase their participation in the Reserva. "We are still only beginning; what I now focus on, more than reaching any set target of cultivated areas or production, is to form this

management council. We are not so worried about the end but with the means, with the process itself". Among the enthusiasts of this innovation is Mr. Paulo Aguiar de Souza. Born and raised in São Jose dos Lopes, he has worked on farms since he was a kid. "My dad wouldn't let me leave" he said. Since he started working in the Reserva, three years ago, he has been part of the agroforestry team. "It is a novel approach that really works because one plant helps the other, like providing shade". Nowadays Diogo and two more workers can cover all the cultivated areas in one day every ten days. If they have ten areas, the four of them can manage the workload in a rotation system. Diogo's team consists of local, young people. He says they are generally more open to new ideas than their parents, who are more used to working with cattle. "I think agroforestry can be attractive to them. It is like *juçara*, he compares, "if you try it, you like it". So familiar was Diogo with the *juçara* tree that he was once known as *Juçara's Diogo*. This came to a halt when his wife, Emília, signaled her disapproval because *Juçara* is also a woman's name in Brazil...

LEARN MORE:

- :: agendagotsch.com/Project
- :: youtube.com/watch?v=gSPNRu4ZPvE
- :: catarse.me/pt/408-projeto-nossa-horta

“GOOD FOR YOU”

In a literal translation into Portuguese, “Good for you” is “Bom para você”. In the state of Minas Gerais, however, they have their own accent and way of shortening the saying that then becomes “bom procê”. In the Reserva it is not rare to hear a native German saying it in a very musical, typical way - just like a local. It would be just one out of the many cultural exchanges that happen daily in the best Tower of Babel style



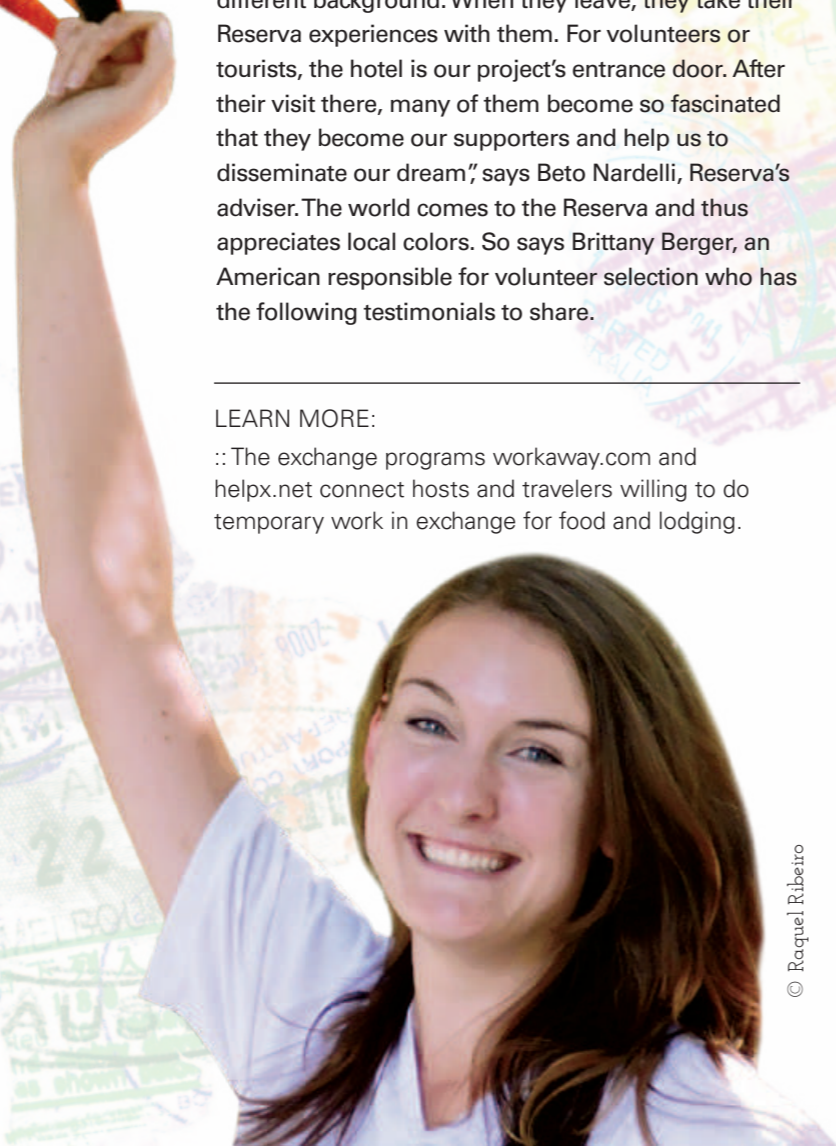
“On my first day, I was introduced to Andreia. She gave me a hug! By night we were already chatting via google translator. Soon after that I got sick. At the hospital in Lima Duarte they did not realize that I actually had dengue. They just prescribed me dipirona. Andreia then took me to another city, Juiz de Fora. This saved my life. Today we are best friends.”
 NADJA HOFMANN (German)

Foreigners have been fascinated by Ibitipoca for very long now. It all started with the illustrious French botanist Saint-Hilaire, who, as early as in 1822, collected several plant species and reported about the region’s natural beauty. In more recent years, the two exchange programs known as Workaway and Helpx have enabled people from many countries to come to the Reserva to work as volunteers. “This has been a fantastic opportunity. Each person comes with a different background. When they leave, they take their Reserva experiences with them. For volunteers or tourists, the hotel is our project’s entrance door. After their visit there, many of them become so fascinated that they become our supporters and help us to disseminate our dream”, says Beto Nardelli, Reserva’s adviser. The world comes to the Reserva and thus appreciates local colors. So says Brittany Berger, an American responsible for volunteer selection who has the following testimonials to share.

LEARN MORE:

:: The exchange programs workaway.com and helpx.net connect hosts and travelers willing to do temporary work in exchange for food and lodging.

SEE THE VIDEO



© Raquel Ribeiro



“The day I arrived in Brazil I was not able to speak a word of Portuguese. I was lost in Salvador, Bahia... I stopped to ask my way to someone, who clearly did not speak a word of English. This person called another person, who stopped another one and another one after that. Then we found a Brazilian woman able to speak English and the six (!) of us managed to find out where I was supposed to go. This was my first Brazilian experience... I will always remember how kind those people were... Likewise, there are plenty of moments of my time at the Reserva of Ibitipoca that I'll never forget about. But I believe that the most important thing is the people who took part of them. The first day I came here... when they showed us around, I remember laughing in the car as I gazed at the amazing mountain view. I remember looking at the stars at night, lying on the grass, amazed by the sight of The Milky Way. Minas Gerais is an incredible spot to look at it from. I remember going horseback riding. They were beautiful, strong Brazilian horses. I paid attention to every plant on the way as the local guide (Ley) was teaching me about them. Another special moment was when we celebrated Carnival in Lima Duarte. It was just the locals and us, far away from Rio de Janeiro’s decadence. I remember waking up one morning, amazed by the view of the rising sun and the mountain surrounded by beautiful pink clouds. Moments are only special because they are shared with people you care about. People in Minas Gerais make everything more special by just being with you, trying to make you understand how life is going on down here. I came to Brazil to enjoy beaches, surf and sun... When I arrived at Ibitipoca I understood that my ideia of Brazil could not be so restricted. The surroundings of Ibitipoca are unique and every day there is something new to discover about nature, about wild animals, about food, the communities around us and, of course, about this culture.”
 CÉLINE BRUTT (Belgian)

“I only spoke a very small amount of Portuguese but I was lucky because Loki was always around to help me out. Having him nearby made me feel more confident. Plus the people who spoke English were always happy to help. William and Edelson in particular made a huge effort to connect with us, and were always happy to try and teach me words and phrases. I really loved getting to know the community on the farm. I loved visiting Lima Duarte and seeing people from the Reserva there. I loved being able to paint murals in the chicken house. And the beautiful landscape, insane lightning, a strong community.”
 ALICE DOLLING (Australian)

“I really liked having delicious breakfast and lunch with all the workers everyday. It was a really youthful atmosphere. I also enjoyed hanging out with William in the garden and in Lima Duarte and with Renato, whenever he was around. He is a lovely, contemplative man and Vivi was a great, fun presence around the place; and Neguinho, (the famous dog that liked eating rocks) of course; and all the beautiful scenery, everything I guess. The mad lightning, incredibly diverse landscape, everyone being really friendly and interested in us, beautiful lakes to swim in and a really idyllic rural beauty.”
 LOKI MACNICOL (Australian)



© Photos: Volunteers personal archive



“Learning a new language is always a challenge. It is at once confusing, frustrating and super rewarding! Everyone in Ibitipoca was incredibly patient with me while I was trying to communicate, either by trying to teach them words in English or to learn them in Portuguese. I needed to adapt to certain cultural differences and put some effort into understanding a new kind of humor. I’m sure I have made mistakes and many times did not realize that some things I said could have been taken in a wrong way. At the end, I really valued the care and welcoming of all in Ibitipoca. A special memory I keep is the day when Antônio Rosa was building a small carriage. He invited me to a ride around the stables and the carriage was pulled by goats! I was so surprised! I couldn’t believe that a carriage pulled by goats even existed and Antônio Rosa was so sweet taking me on this ride. Another special experience was the June festivities (festas juninas) in Lopes: it was impressive to see everybody in their costumes doing the square dance. Everybody was so friendly, trying to teach me how to dance! An incredible day was when we processed the manioc at the veranda of the lodging. Seeing how the tapioca flour and starch were made was so cool, as well as participating in this team work to grate and press the manioc was a nice and unique experience! The food in Minas Gerais is also special. I love Mineiro cheese and the corn breads (broas). The landscape is wonderful as is being surrounded by nature. The trails and views are endless, as much as the bike and horse rides through hidden water falls and other incredible beautiful places. For me, the best feature of this region is to feel so welcome; and the people are also funny!”
 SOPHIA ÉLAN ZAIA (American)

“Everyone in Ibitipoca was incredibly patient with me while I was trying to communicate, either by trying to teach them words in English or to learn them in Portuguese. I needed to adapt to certain cultural differences and put some effort into understanding a new kind of humor.”

“I probably had one of the best times in my life during my one-month stay at the Reserva. Being connected to nature and such lovely, warm-hearted people. I was impressed by the millions of stars in the sky and by the fire in the stables, when everybody helped to extinguish the fire... with so much laughter – laughter always laughter – it makes me wanna go back now. The region is just a diamond of mother Earth nature and people-wise.”
 FRANZISKA GOTTSCHLICH (German)



“Jonny worked in the stables with the team and managed to overcome the language barrier with simple gestures really quickly. Very quickly they exchanged words – with Jonny teaching the guys English words for the objects they were handling and the team teaching him the Portuguese ones. I worked in the nearby after-school project Casa Arte Vida, where I taught English. My lack of Portuguese didn’t hold me back and I was able to teach kids of mixed ages. I soon understood what they were saying, too. Being fully immersed in Reserva do Ibitipoca, helping in the kitchen, eating and spending time with the staff members was a fantastic way to learn about the local culture and start to learn some of the language. Quite apart from how astoundingly beautiful the surroundings are, I think our most special memory is of when we took the horses up the hills and saw the metal sculptures for the first time. We saw all kinds of flora and fauna on that trip and it was fantastic to be able to ride the horses. Likewise, my last day at Casa Arte Vida was very special – saying goodbye to the children I had known and taught for a relatively short time and also feeling the gratitude from the other teachers was very touching.”
 JONNY & REBECCA BATES (English)



I think our most special memory is when we took the horses up the hills and saw the metal sculptures for the first time.”



“I loved being able to paint murals in the chicken house.”
 ALICE DOLLING

THE TIME AND THE WIND

One of Reserva's most amazing places is a simple, thatched roof cottage

Davi Francisco (above; left) was the artist's 'faithful squire' during 21 intense labor days. "It was fascinating to closely follow the project's evolution"

Cornelia basically used rocks, mud, bamboo and roof tiles. The secret lies in the manner the material was tied together with steel wire

SEE THE VIDEO



You pass through a garden, then cross a gate and keep going up a road, walking through the lawn until ... wow! There it is, as if preparing to take off, near to burst or simply provoking our minds with the quantum physics principle according to which nothing is permanent. Our brains order the images creating the illusion of reality and stability, when, in fact, we and everything around us are in constant movement. The installation by Cornelia Konrads translates such complexity into a disconcerting (de)construction and makes us question if what we see right in front of our eyes is indeed real. In a single visit to Reserva, the inquiring mind of the German artist captured the essence of the place. Her *Casa do Vento* (Wind House) is an encounter of simplicity – an essential value of the Reserva philosophy – and the dreamlike, the magical and surprising. Cornelia Konrads lent wings to the rough, nude and lively earth. Her work comes to us as so light that we are reminded we can fly even while our feet are well rooted on the soil. "In the places where I'm invited to work, I like to set up my installations in a relationship with the surroundings. In my walks, I always pay attention to the construction methods. I was intrigued by the wattle and daub you so often see here. I had never seen a house built this way, so soon I decided to build one myself. I would use the traditional techniques but a bit of 'craziness' would be added. The house is placed and positioned in such a way that those looking at it from afar

will find everything to be perfectly normal. However, as one gradually approaches the construction, they will likely go 'oops, there is something weird there'. I enjoy this process that gets people to look and think." Under an inclement sun, we talked half in French, half in English. Cornelia even risked uttering a few words in Spanish while her German would still make itself audible. Her hands were dirty with clay and soot. Her skin was sun-burned. Exhausted from working with heavy steel shafts, she looked rather like a hard-working peasant – not the world citizen that she really is. Cornelia has a degree in philosophy. And yet when she turned 40 she decided to pursue a career in art. Her installations can be seen in parks and public gardens in Sweden, Belgium, Canada, Australia, among other countries. Common to all her work is a seemingly challenge to gravity which can simultaneously complement the surrounding environment. Creating vivid scenes – like those on a frozen frame of a movie – is a way Cornelia has found to get people to reflect. They are challenged to carry on with the movement in imagination: "And when one talks about movement, one also talks about time. This is interesting to me." At *Casa do Vento*, we allow time to pass and we move freely throughout the art workspaces – experimenting pleasure, estrangement, discomfort, and amazement... And what's more, since the local *cachaça*, *Me leva*, is available there, we can then raise a toast to the view, to life and to art.

LEARN MORE:
:: www.cokonrads.de

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WHAT WILL THE RESERVA LOOK LIKE IN 2050?

Carlos Repetto bought the Fazenda do Engenho farm in 1981. The realtor showed him a mountain and added: "It goes on farther from there". Then there was a long extension of empty pastures as far as the eye could see! Gradually this was all reclaimed by the forest and eventually the wild life also reappeared. The Reserva originated from the farm and since then much has happened. But where to now? What is going to happen in the coming years? This is what we asked Reserva friends and collaborators

"Tourists and people, in general, will see that they can enjoy it all without damaging nature"
OZAMAR DE PAULA MACHADO, employee

"As our project is sustained and further developed, we'll have a bigger number of animals coming back to our woods, like quatis (South American coatis), iraras (Eira barbara), and preguiças (sloths). We will see jacutingas, the beautiful birds, and listen to the unmistakable tweets of the inhambu açu and the xororó. The macuco sad hoots as well as the monkey rackets, including the prego, sauás, bugios or muriquis will also be heard. Rabbits, pacas and cotias will be prey to larger predators, like the puma (onça parda), the maned wolf (lobo guará), the ocelots (jaguatiricas), wild pigs and cats. Because I'll be 95, I hope hearing aids will also have become more efficient!"
CARLOS DE ASSIS REPETTO (Carlinhos)



"This place is already so exuberant that I imagine a larger area of vegetation will connect the forests' fragments together in the future. Equally important is how people will see this conservation model. I hope to see more community integration so that they benefit more from the Reserva and help preserve it."
NARJARA LOPES DE ABREU, biologist

"I believe that in twenty years time the groups of muriquis will be back to their usual patterns. The woods are increasing and there will be enough forest to feed all of them."
JOSÉ VICENTE DE PAULA, employee

"In some years this will be a rare piece of heaven with water springs, wild trees, high-quality organic products and a world destination for ecotourism. In short, a true paradise on Earth!"
CLAUDE TROISGROS, chef

"Our infrastructure will be better and we'll have more land. I believe we'll receive many more species at the nurseries and that the Reserva will have changed the lives of many more people, just like it did to mine"
VIVIANE FIGUEIREDO, ex-employee

"I believe it will be even better structured than today, because we are evolving and discovering more about this place. An example are the caves we keep finding. I imagine the forest will be denser and will shelter more and more species."
AROLDO DE OLIVEIRA, employee

"I see my daughter working here. Her dream is to be a chef."
MARLY DE FÁTIMA, Pousada's partner

"I will be living there, with many books, music, clay for sculpturing objects and love in my heart."
HÉLIO PELLEGRINO, architect

"I hope to see a sustainable population of muriquis and many biologists and residents of this area involved in science and conservation"
KAREN STRIER, biologist

"The big kick is that the Reserva will be kept as it is: eternally in silence, with its unique forest, and its unique energy."
MUCKI, visual artist

"I'm crazy about the idea of having a technical school here with courses in agriculture, architecture, ecology and sustainability to promote knowledge and decrease rural exodus."
TZIU, architect



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"We hope to increase vegetable crops because everything can grow here: if you plant it, you're sure to harvest it. But some of us might not be able to see it happen... I'm 72."
PAULO AGUIAR employee





"I hope that it becomes self-sustainable. Then all the food consumed here will be produced here, with our own genetics and without any pesticides. I also hope that people value local production. I learned a lot about cultivating corn and beans with the elders and I hope to pass this knowledge along."
WILLIAN DE OLIVEIRA CASTRO, employee

"I imagine and cheer for a preserved Reserva, an engaged society with strong institutions to influence public policies in favor of environmental conservation. This will be not only a piece of green on the Brazilian map but also na arena for scientific research, relaxation and discovery for tourists and scenic spaces for adventurers; after all, I think it will be an articulated network to benefit the country's education and economic development. In my opinion, technology will play a fundamental role. A more digitally empowered society will be able to use technology with a view to transformation in all areas"
RODRIGO BAGGIO, social entrepreneur, founder and president of Recode



"I have seen an ocelot - it is so beautiful! In 35 years, I hope to walk around and see many more animals of all kinds."
MANOEL MESSIAS, employee

"Ibitipoca speaks to me as being present in the moment. People live too much either in the future or in the past. Here we live in the present. We learn a lot from people and nature. It is a pleasant exchange: I bring a bit of my experience and learn from the wonderful local people. The other day I planted a tree, something I had never done! The seedling was a gift from Tziu. He said 'one day your grand children will hug this tree and you'll need to have at least three of them to embrace it as it will be an enormous and beautiful one'"
RODRIGO LONDRES, Reserva's adviser

"I believe in environmental education: our kids can then become conscious adults that do not accept tree cutting, hunting animals and birds...I hope the future creates an environment of respect for nature. At the Reserva, I hope we have many researchers from different fields and many muriquis with many babies!"
BRITTANY BERGER, Coordinator of Social Environmental Projects



"I wish to see everything ready and in place! And our production of molasses and sweets - I wish to see it thriving!"
ODETE MARIA, employee

"Abundance, many fruits and wood and the young participating in planting and harvesting"
DIOGO JORGE, Permaculture grower

"I hope to see all the land being reforested, everything around in green. And that we see even more animals! I expect to be speaking English well too."
EDUARDO MOREIRA, employee

"Let it be a paradise corner that looks just like Brazil prior to 1500. For this, I believe environmental education is a big tool, so children will turn into environment guardians."
ROGÉRIO CALDAS, forestry engineer and president of IBPN

"I see the Reserva as a reference in world hospitality. It becomes distinct for its project, which has a soul and works with community and conservation. It will then have reached the highest levels of excellence showing the world that it is possible to have sustainable community activities, including tourism, as a solution to many social dilemmas and still be an incredible experience for the guests."
CLÁUDIA BAUMGRATZ, Pousada's Marketing Manager

"A global reference in the social environmental area with high influx of artists and researchers"
BETO NARDELLI, Reserva's adviser

"Everything will be even more thickly covered by the forest and the animals will be safer."
ANTÔNIO ROSA, employee

"I dream that this is going to be the best lodge in the world with our entrepreneurs providing all the food we offer to our guests; we will be integrating people into nature increasingly."
LUCIMARA OLIVEIRA, employee

"That we all make our livelihood from here and help to continue conserving nature."
PATRÍCIA FORTES, employee

"I imagine my kids running around here."
JUNIOR VICENTE DOS REIS, employee

"I hope we will have many more local entrepreneurs."
BIANCA SILVA, employee





"The Reserva do Ibitipoca will be the best place in the world!!!"
RAQUEL PAZOS,
Reserva's manager

"I wish until then the Reserva will have reached all of its sustainability and simplicity goals."
MARÍLIA SOUZA,
EMPLOYEE

"It is going to keep growing and employing even more people because without tourism this place is a desert"
JORGE DIMAS DE OLIVEIRA, employee

"I expect an increase in demand so we can plant more and have more healthy produce here and in all our surrounding neighborhoods."
EDELSON AUGUSTO,
employee

"I think that the Reserva could be a reference to environmental conservation and the preservation of local traditions; in addition to being increasingly integrated into community life."
GUILHERME SALGADO,
Environmental Engineer

"I want to see the social work that provides opportunities to people in the region growing stronger. My father, siblings, and relatives work here and I hope to see more family members too. My dream is to see the Reserva not as a place for employers and employees but for teamwork."
LEILIANE SILVA,
employee

"Being 100% sustainable is the goal. With the idea of the Spa Week, the spa can be a flagship of this. For me, the Reserva is a watershed: it is an enterprise of opportunities that helps one find the work that makes them the happiest. Here we are a family: we fight and we mend fences; mistakes are allowed but the truth always prevails."
ANDRÉIA PIRES,
employee

"I imagine the Reserva will be completely sustainable"
VIVIANE SALINO,
employee

"I enjoyed building a wood and clay house at such lower costs. I hope to see more of this kind of house."
AGNALDO FAGUNDES DA CUNHA, employee

"I would like to see more people working here and more projects happening"
NADJA HOFMANN

"I envision many crops and many families making their livelihood from here."
CLEIDE VITÓRIA,
employee



"I imagine the forest still denser, many water springs and animals everywhere."
JOSÉ ADRIANO,
employee

ACKNOWLEDGEMENTS

For us at U&M it is an honor to have an umbilical connection to such an inspiring social and environmental project as it seeks to locally redefine the relationship of our species with the planet.

I thank from the bottom of my heart each one of our suppliers and employees who have worked with excellence to provide the necessary resources to make this project possible. I also thank our clients for the opportunity to serve them.

We are all part of Reserva do Ibitipoca..

*Obrigado,
Sérgio Machado, Chair*



MINERAÇÃO E CONSTRUÇÃO S/A



