

Experience Report: Ecotourism as an Instrument for the Preservation of Historical-Cultural and Environmental Heritage

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Abstract: This experience report is the result of the extension project “Ecotourism at Brasital”, whose purpose is the dissemination and preservation of the cultural and historical heritage of the Educational, Cultural and Tourist Center (CECT) Brasital, an old textile factory inaugurated in 1890 in São Roque, a town located in the state of São Paulo, Brazil. Fieldwork and action research were used — those involved the study of local history and oral stories, the manufacturing of signs with identification of trees and description of historical buildings, waste collecting, historical-cultural monitoring and environmental education in ecological trails. Besides that, small interventions were carried out in the place and, as a consequence, there was an increase in the number of visitors during the period and the diffusion of principles of maintenance and cleaning of public space.

Key words: ecotourism, historical and cultural heritage, environmental education

1. Introduction

São Roque, is a town with approximately ninety thousand inhabitants (Brazilian Institute of Geography and Statistics, IBGE), is located in the state of São Paulo, just 60 km from the capital, at a strategic place between two busy highways: Raposo Tavares (SP 270) and Castello Branco (SP 280). Besides its strategic location, the town stands out for offering good life quality.

São Roque, among other cities in the state of São Paulo, is considered a tourist destination since it attracts visitors because of the Wine Route (a 10 kilometers road with more than 30 business establishments among wineries, wine houses and restaurants) and Ski Mountain Park — an amusement park which offers skiing, ice skating, snowboarding,

tree climbing, paintball, archery, tracking, horse riding, climbing, cable car and playground [1]. The town is also part of two tourist circuits: “Taipa de Pilão Circuit”, which is located in the state of São Paulo and was created using historical assets listed by IPHAN (Institute of Historical and Natural Artistic Heritage) and “Itupararanga Tourist Circuit”, which is formed by the cities located in the area under influence of the APA (Environmental Protection Area) of the Itupararanga dam [2].

São Roque still has 40% of its territory covered by Atlantic Forest vegetation and is one of the 73 cities included in the “Biosphere Reserve of the Green Belt of the São Paulo City” (RBCV), which differs from other biosphere reserves by making its priority the preservation of a significant vegetal heritage of original cover of Atlantic Forest biome [3].

Today, museums and historic buildings throughout Brazil - including São Roque — suffer from the neglect of public administration, besides that, there is a lack of

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understanding of the population about the cultural and historical function that these buildings represent. Damage caused by fires such as the ones that affected The Portuguese Language Museum in São Paulo, in 2015, and National Museum of Rio de Janeiro, in 2018, which had most of its asset burned, are unrecoverable losses for culture and science.

Located in the center of São Roque, the old Brasital S/A factory is considered a historical heritage in the town. It was built in the late 19th century and it was an important textile factory that produced cotton-based textiles and employed 80% of the available labor in the town by that time. However, after several difficulties related to the invention of new technologies, the factory was closed in the 1970's [5].

After almost 20 years of complete abandonment of its buildings by the old owners, in 1987, the mayor of São Roque, Mr. Mário Luiz Campos de Oliveira obtained the right to use part of the buildings and turned the space into an educational center for the city and region. Nowadays, the space is known as the Educational, Cultural and Tourist Center (CECT) Brasital and it is used by some departments of the City Hall for cultural and educational purposes, such as artistic and professional workshops. Besides that, the municipal library (Professor Arthur Riedel) and the Department of Education and Culture are located at CECT Brasital. There is also an extensive forest area around the old factory [6].

Although it is a space with several cultural and educational attractions, and therefore visited by hundreds of people every week, who come either to study in cultural and/or vocational courses or to have family leisure (picnic and/or photo album), it is possible to notice, from exploratory research [7], a certain disregard from many regular visitors and tourists related to the maintenance of the place and to the preservation of the forest. Thus, the extension project "Ecotourism in Brasital: an experience of historical, cultural and environmental tourism in São Roque" (which is in accordance with São Paulo Federal

Institute (IFSP), from 2015, 2016 and 2017, and has the official right to select monitors and volunteers), promoted by São Roque Campus (IFSP/SRQ), in partnership with the City Hall had, since its beginning the following purposes: 1) to work on the physical conservation of CECT Brasital and its memoirs; 2) to contribute to the preservation of its forest and ecological trails; and 3) to promote social and environmental awareness of visitors and tourists. In order to achieve these results, historical-cultural guiding tours monitored by students were carried out. During those tours some "oral stories" about the factory were reproduced by the guides/students and, about everything, Environmental Education (EE, hereinafter) was practiced in ecological trails. As part of this monitoring practice, students had to survey and register species of flora, as well as making wooden signs showing the trees identification and historical facts of each building of CECT Brasital [8].

In the reflections and orientations on the practice of Ecotourism activities, different researchers point out that these should be associated with EE in parks, museums, schools, environmental preservation areas, etc., specially through environmental awareness programs. Self-guided trails or trails with specialized guides, museums with EE classes with taxidermized animals, demonstration of the interaction between fauna and flora of the region and projects of meliponaria with stingless bees are some examples of ecotourism practices. These activities should also integrate the local inhabitants to help with preservation actions of the area, while also reflecting on the impacts of anthropic actions that degrade the local environment [9].

From these and other orientations, the project "Ecotourism in Brasital" developed a rich experience which is reported in this text.

2. Material and Methods

With the objective of producing information and knowledge of more effective use, the project

“Ecotourism in Brasital” used field work and action research as methodologies. Thus, it aimed to promote conditions for actions and to transform either the place as the environmental conception of its visitors.

3. Results and Discussion

In 2015, when the project began, a historical survey of the buildings belonging to the old factory and its founder was carried out. At that time, the fauna and flora of the ecological trails began to be cataloged, specially from the trail named "Path of the Waters", which lengths about 2,500 meters. For the construction of the historical-cultural and environmental itinerary presented during the monitored tours, it was made a bibliographical review about the history of São Roque and Brasital S/A and about notions of EE [10]. Information was also gathered from informal conversations with those responsible for the administration of the place. According to Article 1 of Law No. 9,795 of April 1999 from Brazil, which deals with EE,

Environmental education is understood as the processes through which the individual and the community construct social values, knowledge, skills and attitudes aimed at the conservation of the environment, which is an asset of common use belonging to the people, essential to the healthy quality of life and sustainability. [11]

Many information used during the monitored tours on EE orientation were gathered by the students and volunteers during the classes at the Federal Institute of São Paulo, São Roque campus [12], especially from their classes in the undergraduate courses of Biological Sciences and Technology in Environmental Management.

The following year, 2016, historical information and orientation on EE previously reviewed were the basis to elaborate a presentation script for the monitored visits that would happen in buildings of the former Brasital S/A and in some of the ecological trails. The definition of the routes for the trails and the small lectures given at each point of stop were based on the

data previously reviewed by the students and volunteers of the project.

Simultaneously to the elaboration of the monitoring script for the tours, a logo and a mascot for the project “Ecotourism at Brasital” were also created. The architecture of the buildings inspired the development of the logo, which used the lines and the orange color of the roof and the tower as a representation of the factory’s rich culture and history (also emphasized during the monitored visits) — and the green of the two trees representing EE and the ecological trails (see the images below). The project’s mascot, designed to draw children’s attention to the importance of the preservation of the place, was created in honor of the founder of Brasital S/A, Mr. Enrico Dell’Acqua. By a vote among the members of the extension action, which was also open to public participation in the Facebook, it was chosen the name “Enriquinho” for the mascot. T-shirts were manufactured to make the identification of monitors and volunteers easier. From a new vote among the team, a model was defined; the logo of the project was used, as well as the logo of the IFSP/SRQ, the words “Environmental Monitoring” were printed on the front part of the T-shirt. A survey of some tree species found in the ecological trails around the factory was also carried out [13]. Thus, species of different types and forms are chosen according to their origin: some are native species (belonging to the local ecosystem, in this case, Atlantic Forest), there are also exotic species (that are outside their natural environment) and there are exotic-invasive species (species outside their natural setting that cause negative ecological impacts) [14].

After having classified the trees according to the previous definition and identified the selected ones, each tree was marked with a simple label containing its popular name. The next step was to research data such as the scientific name, their families, origins and some curiosities about them, which was done with the help of IFSP/SRQ teachers. Therefore, with all the information collected and properly organized, identification signs

of these trees were made (Fig. 1) to ensure that all the visitors — even if they were not participants of the monitored visit — knew the names of the trees and some of its specifications. The material used to install the signs was received because of a partnership with a woodworking course that takes place at CECT Brasital. The signs also have QR Code technology, which allows visitors to access other information about the trees.

The signs were made and printed on common paper, after that they received a plastic coating to withstand rainfall and some other eventualities. Finally, they were attached to wooden structures and installed in front of each tree (Fig. 2).

To stimulate greater interaction between the space and the project “Ecotourism in Brasital”, the visitor, when approaching the reader of his/her cell phone to the existing QR Code installed on trees, was sent to a link that presented a card with the description and curiosities of each tree (Fig. 3). In total, 30 identification signs of the trees were made and installed throughout the area which was part of the trails covered during the monitored visits.

In 2016, before the time set for the monitored visits on Sundays, solid waste was collected in the pre-established route for the trails (that was a suggestion of the students/monitors and volunteers of the project). In fact, this habit of collecting waste in the forest became a mark of the team, encouraging other



Fig. 2 Installation of signs on trees in CECT Brasital.

Figueira Branca



Nome Científico: *Ficus insipida*

Família: *Moracea*

Localização: Região Sudeste

- A árvore pode atingir até 20 metros de altura.
- Os frutos da Figueira Branca são comestíveis, os figos atraem vários animais, que podem se alimentar sobre outras árvores e a semente pode germinar em cima da hospedeira.



Fig. 3 Example of card with the description of the trees.

visitors to collect their waste, or at least not throw things on the ground.

In 2017, after a positive response from the visitors and the local press [15], the project team made signs describing the historic buildings and areas of greatest relevance for the operation of the old factory (Fig. 4). In order to help visitors, signs for public toilets were also installed.

The historical signs were installed in areas of greater importance for the former Brasital S/A, as the warehouses; the chimney; the steam whistle; the Carrara marble fountain; and the sculpture in the shape of a centipede, which has become a symbol of the Cultural Center Brasital. Thus, 8 signs with the identification of historic buildings and the QR Code technology (the code is linked to Facebook page of the project, which included photos of all monitored visits, old pictures of the town and of Brasital S/A with its

Cedro Rosa

Cedrela fissilis
Família: *Meliaceae*



Fig. 1 QR code technology.



Fig. 4 Sign with the description of historic buildings at CECT Brasital.

machinery and plant construction from the 19th century).

In September, 2017, the project also carried out a public event destined to collect solid waste in the trails and gardens of CECT Brasital and to raise environmental awareness, that attracted dozens of people. Monitored visits occurred during 2016 and 2017, between April and November, on Sundays, from 10:00 a.m. to 3:00 p.m. During the visits students and volunteers walked along the buildings and told the stories from oral tradition about the time when there were workers in the old factory, they also included facts from the history of the city. After that, the visit went on the ecological trail, where EE took place, monitors addressed issues such as sustainability, the importance of trees, litter decomposition and other issues related to the forest of CECT Brasital.

3.1 Advances and Setbacks in Historical-Cultural and Environmental Preservation Actions

During the three years of the extension project “Ecotourism in Brasital: an experience of historical, cultural and environmental tourism in São Roque”, there was a significant increase in the number of visitors, mainly on Sundays, when monitoring took place. The project managed to disseminate notions of Environmental Education to 40 visitors on average over the weekends.

Over time, it was evident that visitors kept the place cleaner, it is believed that this was somehow related the action of the EE project and some other activities, such as the collective cleaning event and the collection of waste by the team, the latter being done weekly before the monitored visits.

Even with a noticeable decrease in the amount of waste left on the trails, it was necessary to carry out a profile research of visitors, that was because part of them still threw waste around. The study of Pugas e Silva (2017) revealed that the largest public of CECT Brasital were residents of the city of São Roque (62%), and the main reason for the visits was to study, either for courses offered in the place or to use the library. Among other activities, many people go to the place to have lunch and quick snacks. Besides the historical-cultural and environmental monitoring, 22 tree species from 16 different families were identified in the survey done by the members of the project, as well as 30 signs were manufactured, which means that, many species were cataloged in a small area — the total area of forest contains approximately 30,000 m², rich in diversity of species, many native, exotic and exotic-invasive. Regarding the species of trees identified only in the area that is part of the environmental monitoring trails, 22 tree species from 16 different families were cataloged, 3 Cupressaceae, 2 Areaceae, 2 Moraceae, 2 Fabaceae, 2 Malvaceae, 1 Salpindaceae, 1 Euphorbiaceae, 1 Myrtaceae, 1 Rosaceae, 1 Salicaceae, 1 Lauraceae, 1 Rutaceae, 1 Bignoniaceae, 1 Anacardiaceae, 1 Meliaceae and 1 Protoceae. Thirty identification signs were made for the trees (some of them were duplicated).

By the end of 2016, the year when the signs for the trees had been installed, it was noticed that only one of the 30 boards that had been installed was removed, therefore, 29 remained intact since its installation — some repairs had to be performed during this period, such as the cleaning of the material due to graffiti, some pieces of broken wood that were replaced with new ones and there were still small infiltrations by

rainwater. In the end of 2017, considering the 8 historic signs that had been installed, only the sign attached to the centipede sculpture was damaged and had no repair and another sign needed small repairs. Therefore, although some graffiti were seen both on the identification signs of the trees and in the signs of the historical buildings, none suffered irreversible damages due to vandalism.

In general, publications in the town's main newspapers helped to promote the project, an example was a SPTV report about São Roque (2016), which presented the town as an important tourist destination, mentioning The Wine Route and CECT Brasital, referring to the participation of IFSP/SRQ students in Environmental Education activities in that place.

In addition, important partnerships were established during this period, with COMTUR (Municipal Tourism Council) — which contributed to the dissemination of the project; with restaurants in the city — which helped with the supply of food to the students and project volunteers; and with the São Roque Tourism Division — that provided brochures to promote the city's tourist attractions.

All the activities developed in the project were presented at congresses of scientific initiation and extension as at the VI Congress of Scientific and Technological Initiation of the IFSP, held in Itapetininga Campus in 2015; at the III and V Congress of Extension and Art and Culture Exhibition of the IFSP, held in Sertãozinho in 2016 and in Barretos, in 2018; (VII, IX and X CIPATEC) of the IFSP, held in São Roque, in 2015, 2017 and 2018, and at the 8th Brazilian Congress of University Extension (8th CBEU), held at the Federal University of Rio Grande do Norte (UFRN), in Natal, Brazil.

4. Conclusion

We conclude that the preservation of places (parks) such as CECT Brasital depends on actions that involve the inhabitants in a sustainable way and at the same time, preserve the old buildings and value fauna and

flora — principles that contribute to the awareness of visitors and tourists. This can be achieved through the practice of Ecotourism and consequent dissemination of the place as an important source of culture, history and leisure.

The attaching of identification signs to trees and historic buildings, as well as the public group events to collect solid waste help regular visitors and tourists to understand the need of prevention and conservation actions, raising awareness to keep the site clean and sustainable.

Although some of the signs were affected with the disregard of part of the visitors, as graffiti and small damages were seen on signs, in general, the installation activity has had a positive effect on public awareness. An evidence of this was the decrease in the amount of solid waste left in the woods after the installation of the signs and establishment of guided visits. Therefore, it was verified that the practice of Ecotourism could positively influence the preservation, education and environmental awareness in places with similar characteristics to those of the CECT Brasital park.

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