Making Tracks: Environmental Histories of the Brazilian Cerrado

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All images courtesy of the author, taken 2013 (unless otherwise specified). Featured image: Road to the Espírito Santo belvedere, Jalapão State Park, Tocantins

By **Claiton Marcio da Silva**

The Brazilian Cerrado made me an environmental historian.

My interest in the agricultural transformations in Brazilian savannas—a biome located in the central part of Brazil that extends over an area of approximately 2.000.000 km²—started when I left the southern and subtropical regions of the country to seek employment in the mythical Brazilian backwoods. For seven years, I lived on the border between the Cerrado and the Amazon, north of Tocantins State, and witnessed the intense environmental transformations the region suffered, mostly as a result of increasing soybean crops. Just as the land has been transformed, so has my relationship with it. The intense shapes, colors, textures, flavors, and smells that characterize this mysterious landscape have shaped my own experiences of this place. Many fond years spent here, and my lively memories, have made Cerrados a fascinating object of research for me.

- *Traditional Adobe house, Quilombola Community of Formiga, Mateiros, State of Tocantins*
- *Flood related to the formation of a hydroelectric lake (Lageado Hydrelectric Power Plant, near Miracema do Norte, State of Tocantins)*
- *Typical Cerrado field close to the plateaus of Serra do Espírito Santo, Tocantins*

However, long before I took this path, social issues made me a historian.

In 1996, when my gaze first turned to history, Brazil was facing significant growth in neoliberal policies, which really just meant political conservatism disguised as modernism. Poorer populations were left vulnerable to market laws, which accentuated social inequalities during both terms of then president Fernando Henrique Cardoso. By that time, social movements such as the Landless Workers' Movement (MST), the Movement of People Affected by Dams (MAB), and the Peasant Women's Movement (MMC) had revealed to the public how the Brazilian government, alongside national and international private corporations, had been oppressing its own population.

The year of 1996 was also the year that saw the massacre of peasants in Eldorado dos Carajás (State of Pará), the repercussions of which strongly influenced society's uneasiness towards and engagement with Brazil's historical problems, such as agrarian reform. In this way, my generation of historians developed an attachment to the progressive agenda. Writing history became bound up with social activism, and historians like Edward Palmer Thompson and Michelle Perrot had a strong influence on us.

We understood the work of the historian to be, above all, a social intervention—an intellectual tradition that has persisted and continues to grow among the current generation. My work, for instance, pays great attention to Brazilian social problems in the twenty-first century and incorporates reflections on the consequent environmental transformation in the country. This was the subject of my doctoral dissertation, which focused on the North American billionaire Nelson Rockefeller and his modernization programs for agriculture in Latin America. One of the programs cultivated by Rockefeller displays how North American agronomist engineers visualized the Brazilian Cerrado as the "last border," trying to replicate the American Midwest agricultural development model in the backwoods of central Brazil. My interest in this particular process led me to the Rachel Carson Center for Environment and Society.

As an object of historical research, the agricultural transformations suffered by the Brazilian savannas provide meaningful discussions for environmental historians all around the world. To quote the French historian Antoine Acker in his book **Volkswagen in the Amazon**, these topics are important for environmental history because they are "more than just an example of unequal exchange."

- *Produce from the city market in Palmas, State of Tocantins, including cupuaçu (bottom left), cocoa fruit (top left/bottom right), and Jackfruit (between bottles of beans and honey)*

- *Traditional small plantation in progress. Here, the farmer is using fire-management practices to clear land in the Babaçu Forest (Orbignya sp.), in order to fertilize the soil and, later, to cultivate maize and other crops. Tocantinópolis, State of Tocantins.*

- *Serra do Espírito Santo, Jalapão State Park, Tocantins*

The environmental dynamics of the Cerrado are unique: Cerrados are composed of relatively small trees that are around only three to five meters high (not quite resembling a forest), though their thirsty roots extend up to eighteen meters into the ground in search of resources. This complex engineering, shaped over thousands of years, effortlessly carries surface rainwater straight to the water table. Forest clearing aimed at large-scale monoculture modifies this system, which often causes significant erosion. This is one example of how agricultural exploitation compromises sustainability.

As Christof Mauch pointed out to me, the Brazilian Cerrados have undergone historical processes that are currently being experienced worldwide. After a long season of agricultural experimentation, a cultivation model was put together for the savannas and infertile areas in Latin America, Africa, and Asia. This model drew on North American techniques and technologies that were developed at universities and research centers, and later implemented in Japanese-Brazilian cooperative programs. In the early 1980s, North American researchers introduced fertilization techniques in Indonesia that had been learned from Brazilian Cerrados; similarly, in the 1990s, the coffee cultivation program PROCAFE placed Brazilian technicians in El Salvador. By the dawn of the twenty-first century, Brazilian researchers, supported by international institutions, had developed agricultural conversion programs for the Mozambican savannas. These cases illustrate that actions like soil fertilization, pasture improvement, and crop adaptation, combined with the widespread utilization of pesticides that have been banned in different parts of the globe, have created a system that is capable of adapting and dramatically changing the environment: the Cerrado.

Traditional Cattle Management, close to Tocantinópolis, State of Tocantins

Paradoxically, from a neocolonial/imperialist perspective, the farming elite was instrumental in spreading the Cerrado model worldwide, mainly in Mozambique, and Paraguay. Around three generations ago, southern European farming families—mostly from Veneto in Italy and from different parts of Germany—subsisted by means of a peasant lifestyle; nowadays, it is clear that the self-made subtropical-man myth generated social

exclusion and environmental devastation throughout the Brazilian territory. I believe that academic research has an important role to play in the construction of new interpretations and agendas for social-environmental activism—particularly in light of intensifying deforestation and increasingly repressive policies regarding the rights of indigenous populations.

During my stay at the Rachel Carson Center I was able to access a beautiful and complex intellectual environment that enabled me to shape my ideas. I hope to continue to be able to draw attention to the plight of Brazilian and global savannas.