Comparing Apples, Oranges, and Cotton: Environmental Histories of the Plantation

28– 30 July 2011

Conveners: Franziska Torma (RCC) and Frank Uekötter (RCC)
Sponsors: Federal Ministry of Education and Research and Rachel Carson Center for Environment and Society (RCC)

Participants: Stefania Gallini (Universidad Nacional de Colombia, Bogotá), Corry Ross (University of Birmingham, UK), Frank Uekoetter (RCC), Tiago Saraiva (University of Lisbon, Portugal), Micheal Roche (Massey University, New Zealand), Jeannie Whayne (University of Arkansas, Fayetteville, AR), Paul Sutter (University of Colorado, Boulder), Mart. A Stewart (Western Washington University, Bellingham), Stuart McCook (University of Guelph), Christiane Berth (Universität St. Gallen), John Soluri (Carnegie Mellon University, Pittsburgh, PA), Jó Klanovicz (Universidade Estadual do Centro-Oeste do Paraná, Irati, Brazil), Ulrike Plath (Under and Tuglas Literature Center, Tallinn, Estonia), Chris Sheperd (Australian National University), Marina Padrão Temudo (Tropical Research Institute, Lisbon, Portugal), Mitch Aso (University of Wisconsin, Madison), John McNeill (RCC/ Georgetown University)

From 28 to 30 July 2011, the Rachel Carson Center for Environment and Society in Munich convened a workshop with the title "Comparing Apples, Oranges, and Cotton: Environmental Histories of the Plantation." Sponsored by the Federal Ministry of Education and Research, and hosted by Franziska Torma and Frank Uekötter (both RCC), the three-day workshop focused on the multitude of environmental histories of the plantation around the globe. The workshop was divided into six thematic sections, each dealing with specific plantation systems and plantation products.

After a brief introduction to the Rachel Carson Center's work by its directors, **CHRISTOF MAUCH** and **HELMUTH TRISCHLER**, the workshop began with a roundtable entitled "Global Perspectives on the Plantation." In her presentation on plantations in Latin America, **STEFANIA GALLINI** (Universidad Nacional de Colombia, Bogotá) emphasized the importance of the plantation as a biological and political system encompassing virtually all altitudes and latitudes of Latin America. However, according to Gallini, previous historiography had merely analyzed plantations in accordance to socio-economic master narratives of plantations' developmental footprint in Latin America, and had focused on too few case studies. As stated in these socio-economic master narra-

tives, plantations were defined as surplus-producing institutions that formed the cornerstones of export-oriented agro-oligarchies. However, since the 1990s and 2000s, new environmental histories have added diversity to these standard narratives by focusing on plantations as sites of exchange between indigenous and foreign knowledge, and by analyzing the dynamic ecology of the plantation. Gallini presented that there are several challenges facing future environmental histories of the plantation: historians will have to come up with more nuanced definitions of the plantation, analyze in more detail the human and non-human dynamics of the plantation, explain how the global system of the plantation has been able to survive, and continue to justify the relevance of an environmental perspective on the plantation.

In his roundtable contribution on "Plantations in Southeast Asia," **CORRY ROSS** (University of Birmingham, UK) stressed the importance of plantations as nodal points connecting entire regions to global systems of knowledge, commodity, and biological exchange. Where conventional historiography dealt with plantations along the two dichotomies of labor and land and state and capital, the advantage of environmental history is its ability to stress the dynamic role of nature within the plantation system. Following the logic of dichotomies, Ross raised the possibility of analyzing Southeast Asian plantations according to their climatic location in equatorial and intermediate climate zones and plantations' antagonistic relationship to indigenous practices of swidden agriculture. Environmental historians need to pay attention to the problematic coexistence of both modes of production. They also need to explain why plantations were able to monopolize "scientific agriculture," and why local smallholders were frequently associated with subversion. Another question requiring historians' attention is whether smallholders are really more efficient than plantations.

FRANK UEKÖTTER's (RCC) presentation on the "European plantation" was the final contribution to the roundtable. According to Uekötter, it is commonly held that only Mediterranean countries have a tradition of plantations in Europe. Such a view, however, obscures the fact that modern forestry created forest plantations in Northern Europe in the nineteenth century. In Uekötter's opinion, these forestry plantations had several peculiarities separating them from other plantations: they were science-driven, co-evolved with a profession of forestry experts, and were strongly associated with the state from the very beginning. According to Uekötter, the initially unique ideology of these forest plantations was subsequently exported globally.

Following the above-mentioned contributions, the workshop's participants focused on the challenge of providing a definition of plantations in their discussion. Differences between plantation-specific and conventional forms of agriculture and their distinct environmental characteristics were discussed as well as the consequences of substituting coerced and manual labor with mechanized and oil-driven labor on modern plantations. Another focus of the discussion was about the degree to

which the history of plantations necessarily correlates with histories of colonialism.

After the first day's discussion about the general challenges of plantation history, the second day of the workshop focused on more specific geographic and climatic plantation regimes and their particular products. The first presentation of the first section was given by **TIAGO SARAIVA** (University of Lisbon, Portugal) and was entitled "Plantation Fascism: Agriculture Experiment Stations and Colonialism in Ethiopia, Mozambique, and Eastern Europe." In his presentation, Saraiva stressed the importance of agricultural experiment stations for the Fascist imperialist project, and analyzed the three cases of Portuguese cotton in Mozambique, Italian coffee in Ethiopia, and Nazi rubber in Eastern Europe. Each of these plantation schemes made massive use of slave or coerced labor, and had plant breeders' artifacts as their material foundation. In order to understand Fascism's material basis, Saraiva made the case for placing the history of plantations at the heart of future histories of Fascist imperialism. The subsequent discussion focused on potential peculiarities of Fascist imperialism as opposed to non-Fascist imperialism and on issues of continuity between fascist and pre- and post-Fascist plantations. The discussion also raised the question, of whether the long-term impacts of Fascist plantations on the environment differed from the impacts of non-Fascist ones.

In his presentation on the "Environmental History of Plantation Forestry in New Zealand, 1897-1987," **MICHAEL ROCHE** (Massey University, New Zealand) gave an overview of the different booms and busts of state-owned and private forest plantations in New Zealand since the end of the nineteenth century. Initially motivated by projections of future wood scarcity, the first plantations were characterized by a surprising lack of expertise. Subsequent plantation booms in the 1920s and 1930s were financed by bond-selling private companies, but suffered from scam schemes. A last state-driven plantation boom in the 1960s ended with a neoliberal-motivated privatization of the plantations. Environmentally, the mono-cultural forest plantations consisted mainly of imported exotic species, and were thus threatened by pests, fungi and fire. In his concluding remarks, Roche portrayed forestry plantations in New Zealand as an example of how European models of forestry changed following their export to other countries, and remarked that New Zealand was also an exception to the rule of deforestation necessarily resulting from plantation agriculture. The subsequent discussion focused on the peculiarities of tropical and temperate plantation systems and the different economic and environmental systems behind fast- and slow-growing plantation regimes. Another topic of the discussion was the role that pictures and rhetorical tropes play in creating a recognizable image of plantations.

The second section, entitled "The American Plantation" was opened by **JEANNIE WHAYNE**'s (University of Arkansas, Fayetteville, AR) presentation on "Queen City and King Cotton: Memphis and the Trans Mississippi West." Analyzing Memphis according to the methodology established in William Cronon's *Nature's Metropolis*, Whayne portrayed the rise of Memphis as a major and influential cotton hub that made the entire region an unlikely story. Settling on a bluff over the Mississippi, the citizens of Memphis faced both health hazards (e.g. yellow fever and malaria) and natural disasters in the form of flooding from an increasingly fast-flowing Mississippi River. The difficult negotiation of these challenges took place in the face of the political turmoil caused by the Civil War, power struggles within the city, and the reluctant involvement by the federal government.

The environmental consequences of the US South's cotton economy were the topic of **PAUL SUTTER's** (University of Colorado, Boulder) presentation entitled "The Moral Meaning of 'Rough, Gullied Land': Soil Science, Spectacle Erosion, and the Roots of US Soil Conservation in the Plantation South." Using the example of Providence Canyon (Georgia), Sutter described how the soil conservationists of the USDA came to recognize, measure, and understand the problem posed by erosion in the South. In turn, this process of recognition led to the creation of a national effort to map and combat the problem that had formerly simply been known as "soil exhaustion" In addition to his portrayal of the rise of US soil conservationism, Sutter presented the flip side of soil erosion as an aesthetically pleasing phenomenon in the case of Providence Canyon, which is now a protected state park in Georgia. In his concluding remarks, Sutter reflected on the visual culture of environmental problems, such as the complicated distinction between human-induced unnatural erosion and natural erosion. He also commented on the trope of linking Southern landscapes of destruction with Southern slavery and plantations that had become common during the years of the New Deal.

MART A. STEWART (Western Washington University, Bellingham) presented a very different picture of Southern environmental attitudes in his talk on "Plantations, Agro-Ecology, and the US South." After criticizing the neglect of factors such as soil, plants, topography, and climate in previous histories of Southern plantations, Stewart pointed to the role of environmental history in diversifying notions of plantations as identity- and race-producing institutions. In order to give an example of such a history, Stewart described the brief rise of conservationism amongst Southern planters in the 1830s, in order to show how environmental aspects of Southern plantation regimes were used to produce and justify narratives of Southern uniqueness in the face of stiff Northern anti-slavery rhetoric. In addition to the planters, plantation slaves also developed their own understanding of local environments, which they fused into an important part of their culture and used to enhance their socio-economic position. For Stewart, Southern plantations were thus sites where social and political relations were naturalized and functioned as antecedents to present day environ-

mental justice movements.

The subsequent discussion of the second section dealt with the ambiguous role of early conservationism in plantation regimes, where it served both to create awareness for environmental problems, but was also meant to increase the productivity of these plantations. Other issues under discussion were the evolution of nineteenth century US plantations and their relevance for other plantation systems. The discussion also touched on the issue of the sublimity of plantations: can one really condemn plantations for their environmental consequences, if some of their sites are being turned into UNESCO World Heritage Sites? Should one allow landscapes eroded by plantations to "heal" again?

The following three sections of the second day dealt with plantation products. **STUART McCOOK** (University of Guelph) opened the third section centering on coffee with a presentation titled: "Liberian Coffee: A Plantation Crop That Never Was." Emphasizing the internal fluidity of plantations, McCook employed the metaphor of a combination lock to explain why some plantation crops were successful and others failed. According to McCook, a product has to prove itself successful both in environmental and economic terms to become established in the international plantation system. As an *ex negativo* example of this rule, McCook presented the history of Liberian Coffee's failure to supersede the already established *Coffea Arabica* at the end of the nineteenth century. Profiting from a crisis in Arabica production, Liberian coffee was at first considered superior by many planters due to its supposed resistance to plant diseases and larger cultivable area—its only disadvantage seemed to be its unusual taste. However, after a brief introduction to the international market, *Coffea Liberia* crashed due to the spread of disease, its failure to establish itself as an accepted "taste," and the advent of the resistant and more neutrally flavored *Coffea Robusta*.

The second presentation on coffee was **CHRISTIANE BERTH**'s (Universität St. Gallen): "Between 'Wild Tropic' and 'Civilization': Guatemalan Coffee Plantations as Seen by German Immigrants." Berth described the role of German settlers in facilitating the rise of Guatemalan coffee as a major export crop in the second half of the nineteenth century. Berth's hypothesis is that the Germans saw themselves as pioneers, whose task it was to "civilize" a young and "underdeveloped" Guatemala through the conquest and domination of nature. According to Berth, the settlers' view of Guatemalan nature was informed by an initial lack of diseases and an abundance of land, which led them to be insensible to issues such as the environmental degradation resulting from plantation agriculture. In spite of their environmental volatility, the German immigrants discursively established plantations as safe and orderly havens in the midst of a supposedly unordered and hostile wilderness. Following the establishment of their plantations, the settlers then tried to reform both Guate-

malan nature and its people according to their ideal of orderliness. However, a sense of ambivalence never left German plantation owners, who suffered from inter-European isolation and viewed Guatemalan nature as an ever-present threat to their achievements.

The subsequent discussion focused on the advantages of histories of failure such as that of Liberian coffee in emphasizing the volatility and contingency of plantations' success and deconstructing the trope of plantations as rigid and unadaptive institutions. Another topic of the discussion was the role that discourses of property, gender, and mental disease played on plantations.

JOHN SOLURI's (Carnegie Mellon University, Pittsburgh, PA) presentation "An Animal Plantation: Sheep Estancias and the Transformation of Tierra del Fuego (1880s-1950s)" constituted section four of the workshop on "Animals and Grapes." In his presentation, Soluri analyzed the history of sheep ranches on Tierra del Fuego through the lens of environmental history. Soluri argued against simply presenting histories of plantations as stories of rise and fall. Instead, he advocated focusing on periods of transition from one system to another—such as from extractive agricultural production to tourism in the twentieth century. According to Soluri, the fact that all plantations work with living organisms, which are in constant, cyclical flux, further justifies a historical focus on contingent fluidity and life-cycles. Soluri's presentation also challenged the supposed superior productivity of small-holders vis-à-vis large-scale plantations in the cases of sugar cane and wool production.

The ensuing discussion of the presentation was concerned with the underrepresentation of animals such as the horse in the history of plantations and environmental history in general. Another issue under debate was the adequacy of standard narratives of the "market" in coordinating consumer-producer relationships. According to some participants, the history of plantation repeatedly provides examples of producers creating and steering markets based on extrapolations of future consumption and environmental developments.

The fifth and final section of the workshop's second day was grouped around the product of apples. In his presentation on "Modern Apple Plantations in Fraiburgo, Brazil (1958-1989)," **JÓ KLANOVICZ** (Universidade Estadual do Centro-Oeste do Paraná, Irati, Brazil) analyzed the fairly recent transformation of the Fraiburgo area into the hub of Brazilian apple production. Favored by a rise of postwar apple consumption, a temperate climate, and the military government's autarky policy during the 1960s, the first apple plantations in the area were established by Brazilians of German and French descent. However, it was only in the 1970s that the plantations broke even after environmental problems such as ground acidity and falling flowers had been solved with the large-scale in-

troduction of external know-how and technology. Up to this time, the private sector had received large-scale government subsidies in the form of income-tax breaks. According to Klanovicz, the story of Fraiburgo apple plantations was neither one of success nor of failure, instead, it was marked by a permanent tension between the plantations and their non-human environment that had to be continually adjusted through the massive use of technology. The most recent challenge to the plantations is posed by climate change and deforestation, which have made the region's climate unfavorable for apple production.

ULRIKE PLATH (Under and Tuglas Literature Center, Tallinn, Estonia) was the day's last presenter. In her talk on "Baltic Apples in Tsarist Russia and in the New National Economies of Latvia and Estonia (1870-1939)," Plath made the case for viewing Estonian apple orchards as plantations. Founded in the eighteenth century, these orchards soon became major producers of agricultural exports, but were mostly destroyed during the 1940s—together with the records dealing with them. According to Plath, the initial colonial situation of Estonian apples in Tsarist Russia, their systems of dependent labor, and their reliance on science warrant talking of Estonian apple orchards as plantation regimes. While justifying the inclusion of the small-scale apple orchards into the history of plantations, Plath also emphasized the importance of Estonian orchards as the birthplace of a systematized hybridization theory that was based on the engraving of apple rootstocks.

The discussion of section five focused on plantation products' relevance for structuring regional identities. Another area of discussion centered on the interrelationship of contemporary aesthetics and the layout of plantations. The participants also pointed out that the history of plantation by-products was an issue deserving more attention from historians.

The third and final day of the workshop began with a sixth section on the "Tropical Plantation." In his talk on "Plantations, Technical Knowledge, and Militarism in Portuguese Timor" [devised in collaboration with **RICARDO ROQUE** (University of Lisbon, Portugal)], CHRIS SHEPHERD (Australian National University), recounted the semi-success story of Portuguese and native-held plantations in Timor. Pointing out that Timor was not a settler colony, Shepherd stressed that the Portuguese were dependent on a strategy of "divide and cultivate" to establish plantations that broke with local taboos and were hostile to indigenous practices of swidden agriculture. Although there were some state- and military-owned plantations, the Portuguese managed to integrate local elites into their plantation system by giving them a share of the profits. Not only did such a strategy enable the Portuguese to expand their production into hitherto *lulik* (taboo) areas, it also enabled them to tap resources of coerced labor without risking resistance such as the uprising of 1912. However, according to Shepherd, the lack of scientific expertise proved fatal to many of the planta-

tion projects and led to an extremely low productivity of established Timorese plantations. For Shepherd, perpetual violence was thus the dominant feature of the Portuguese plantation project in Timor.

Following the presentation on Timor, **MARINA PADRÃO TEMUDO** (Tropical Research Institute, Lisbon, Portugal) gave a talk titled: "The Rise and Fall of a Plantation System in S. Tomé and Principe." After the collapse of early slave-based sugar plantations and a two-hundred-year absence of plantations, planters reestablished coffee and cocoa plantations on San Tomé in the early nineteenth century. Because San Tomé did not command over sufficient food and labor, the new plantation owners imported both from abroad, while engaging in deforestation and land-grab practices. In contrast to the monocultures of earlier plantations, plant diseases and full-sun exposure led planters to establish polyculture plantations and agroforestry. After independence in 1974, the plantations were nationalized, but were characterized by economic inefficiency. In addition, food shortages led to an increase of subsistence agriculture. According to Temudo, land distribution schemes during the 1990s alleviated severe food shortages and have led to agricultural innovation by local smallholders. However, because old elites remain in control of the plantations, these are still marked by economic inefficiency. Following Temudo, plantations have left their mark both in the landscape and ecosystem of San Tomé, where indigenous forests have become more diverse due to the prolonged exposure to different plantation crops.

In his talk on "Forests without Birds: Spaces of Nature and Culture on the Rubber Plantations of French Indochina," **MITCH ASO** (University of Wisconsin, Madison) portrayed French and Vietnamese rubber plantations in the twentieth century as crucial experimental sites for the epistemic construction of race, politics, disease, and the environment. Starting in the 1910s, rubber plantations were both sites of knowledge production and application, and gave rise to the discipline of agroecology. Agroecologists studied the local ecology in order to boost plantations' productivity. However, some of the indigenous French-trained agroecologists were quick to fuse emerging Vietnamese nationalism with their agricultural knowledge and produced a subversive brand of Vietnamese agroecology. According to Aso, rubber plantations in Indochina were perpetually hostile to local practices of swidden agriculture and functioned as agro-military outposts for both sides during the Vietnamese struggle for independence. After independence, Vietnamese governments continued to value their now-nationalized rubber plantations as cornerstones of the national economy.

The discussion of the sixth and final session focused on the supposed global hostility between plantation and swidden agriculture: where plantations functioned to create boundaries and locate populations in hitherto "unordered" territories, the mobility of swidden agriculture was associated with

studying both practices in unison due to plantation owners' habit of discriminating against local swidden agriculture to further their own interests.

After the end of the thematic sections, **JOHN R. MCNEILL** (RCC/Georgetown University) concluded the workshop with some final comments. In his talk, McNeill summed up the workshop's themes and attempted to establish the following variables to describe plantations: a plantation's size; a plantation's mono- or polycultural cropping system; a plantation's labor regime; a plantation's orientation towards local or global markets; a plantation's location; a plantation's produce. According to McNeill, another important consideration for historians is whether they decide to focus on regional or global styles of plantation. In this context, McNeill advocated an additional perspective on distinct disease-regimes linking plantations. Following McNeill, another possible perspective on plantations could be an analysis of the ways in which environmental and scientific knowledge originate, flow through, and are transformed on the site of the plantation. In McNeill's opinion, histories of plantations face the inevitable challenge of reconstructing the subaltern voices of plantation laborers.

McNeill concluded his talk by establishing three criteria—or "three C's"—according to which historians should study plantations: (1) the socio-economic and environmental **circumstances** of plantations, such as the proximity to transport routes, indigenous practices of swidden agriculture, and the quality local soils; (2) the **consequences** of plantations such as the exhaustion of soils, the spread of plant diseases and fungi, the elimination of rival organisms, and the succession of plantation regimes by tourism or subsistence agriculture; (3) the **culture** of plantations, such as tropes of cornucopia, plantation nostalgia, and plantation hatred. According to McNeill, the relationship of plantations to colonial regimes could potentially function as a fourth "c."

The workshop's final discussion centered on McNeill's "three-c" proposal. The participants voiced an interest in additional studies on the food supply of plantations and on the differences between temperate and tropical and colonial and non-colonial plantations. Building on Kenneth Pomeranz's concept of developmentalism, it was suggested to study plantations as vehicles of internal colonization and enhancers of wealth extraction. A further demand raised by the participants was to study the power- and gender-relations structuring plantations and the role of plantations as places of discipline. Another suggestion was to interpret plantations as metabolisms in a thermo-dynamic sense and study their energy in- and outputs as well as the availability of animal protein as a necessary precondition of functioning plantations. The discussion also focused on the antagonism between the plantation and more Jeffersonian models of conventional and swidden agriculture. A major challenge identified by the final discussion was the integration of mechanized postwar agriculture and the sub-

stitution of human labor with fossil energy into conventional histories of plantations.

— Claas Kirchhelle