

Abstracts

Isthmus in the World. Elements for an Environmental History of Panama *Guillermo Castro*

This article proposes a framework for the study of interactions between human societies and the natural world in the Isthmus of Panama, and the consequences of these interactions over time. It also wants to encourage a new reading of the best-known sources and authors associated with this issue – from the reports of early Spanish travelers to the writings of contemporary specialists such as Dolores Piperino, Richard Cooke, Omar Jaén Suárez, and Alfredo Castillero Calvo –, as well as the adoption of a new perspective on the deep origins of the environmental problems the country faces today. After a general characterization of the Isthmus' ecoregions, the author proposes a historical periodization reflecting successive human strategies of interaction with the natural world, differentiated in terms of the technologies employed and the corresponding social relations; the expression of these strategies in environmental culture and values; modes of land management; and the impact of all this on the natural world. Special attention is given to the ecological footprint of interoceanic transit from the 16th century onward, and to the search of alternatives allowing more sustainable ways of relating to nature in Panama.

Violent Landscape: Global Explosions and Lao Life-Worlds *Holly High*

Laos, a small country tucked into the heart of Southeast Asia, seems an unlikely target for the world's most intensive bombing campaign. But from the 1950s to the 1970s, the U.S. intervened in Laos to combat the local communist forces and to attempt to stop the flow of North Vietnamese supplies through Lao territory, an in-

tervention prompted by a particularly “global” outlook. The U.S. military intervention was characterised by tactics that pitted science and technology against the local terrain, weather, and vegetation. The Lao landscape was a violent landscape during this era, as it was entangled as both agent and object in the conflict. The U.S. war on nature in Laos remains a salient part of contemporary Laos, as the country grapples with perhaps the world’s most serious unexploded ordnance problem. Thus today, the Lao landscape is violent in yet another sense: past violence is incorporated into today’s land. This is reflected in local retellings of the violence and devastation of the era, stories that stress images of the loss of natural wilderness.

Controlling Nature and Transforming Landscapes in the Early Modern Caribbean

Laura Hollsten

In the seventeenth century, the Caribbean islands were increasingly incorporated into the international trade network, the core of which was constituted by the European colonial powers. The growth of markets and buying power in Europe stimulated investments in sugar plantations. Consequently, sugar cane agriculture in the Caribbean developed into a considerable apparatus, consisting of land, people, animals and buildings. Agricultural methods and techniques, as well as well-organised routines in sugar production, were developed with a view to managing the sugar plantations as efficiently as possible. The results were in many cases deforestation, impoverished soils and erosion. The changes in the landscapes were noticed and commented upon by visitors who wrote travel accounts of the English and French islands. By the end of the seventeenth century, new agricultural methods and techniques had been developed, based on the growing body of experiences of the sugar planters. The aim of the strict regime on the plantations was to control nature in order to produce sugar as efficiently as possible. In some cases experience taught planters to use resources in a more sustainable manner. The ambition to control nature created the solutions to the problems caused by overexploitation. Conservationist measures were taken to keep the sugar production apparatus in as good a shape as possible.

The Nature-Culture Trap: A Critique of Late 20th Century Global Paradigms of Environmental Change in Africa and Beyond

Emmanuel Kreike

During the late 20th century, the modernization, the declinist, and the inclinatist paradigms dominated how environmental change was conceptualized, analyzed, and described. Each paradigm was treated as being exclusive, global, and universal

in scope. Although the paradigms differed in how they evaluated the direction and outcome of environmental change, a characteristic they had in common was that they framed change in a unilinear Nature-to-Culture fashion and homogenized the agency, process, and outcome of environmental change. A more open-ended approach that is not based on *a priori* environmental unilinear trends (e.g., deforestation or reforestation) yields a more nuanced understanding of environmental change. Such an approach requires disaggregating the objects and subjects of environmental *changes* as well as differentiating the process itself, allowing for the identification of multiple (sub-)processes and multiple trajectories of change.

**Poverty in the Gwai Forest Reserve,
Zimbabwe: 1880-1953**
Vimbai Chaumba Kwashirai

Nelson Mandela observed that, like slavery and apartheid, poverty is not natural. It is man-made and it can be overcome and eradicated by the actions of human beings. This study examines the role of colonial foresters in introducing new socio-economic arrangements that resulted in increased poverty among the Tonga, Shona and Ndebele communities in the Gwai Forest Reserve (GFR) of North-Western Matabeleland, Zimbabwe. Countrywide, Europeans appropriated land and exacted tax and labour from indigenous peoples. Africans were assigned forty infertile reserves that served as labour reservoirs for European mining, agriculture and manufacturing. Officials undermined the African institutions of extended family and traditional agriculture that had provided for the welfare of poor people in pre-Rhodes Zimbabwe. The commercial forest sector in the GFR replicated in microcosm the overall colonial economic structure. Forest officials viewed Africans resident on gazetted state forests as sources of labour for forestry work. Government forest policy retained small numbers of African families in each of the eight state forests of North-Western Matabeleland for labour requirements. The eight state forest reserves had a combined total area of 1.6 million acres, half of which was in the GFR. Imperative labour demands forced the government to retain the Ndebele, Kalanga and Tonga as forest tenants whose rights to land, livestock, pasture and forest were severely restricted by forest rules and regulations. African forest dwellers were given permits and thus acquired the status of tenant farmers with an obligation to work for the Forestry Service and commercial timber millers. In the period under discussion, 1880-1953, landlessness and appalling working conditions turned forest tenants into the poorest people in colonial Zimbabwe. Their poverty was exacerbated by inordinate regulations denying them access to facilities such as boreholes, schools and stores for fear of fire hazard to forests.

Environmental History, Traditional Populations, and Paleo-territories in the Brazilian Atlantic Coastal Forest

Rogério Ribeiro de Oliveira

This article examines the long-run anthropogenic factors that have affected the Atlantic Coastal Forest, where human activities was one of the ecological factors that influenced the biome, which formerly covered almost the entire Brazilian coast. The author proposes the concept of “paleo-territories” as part of this analysis of successional processes. The expression refers to the spatialization of influences of past ecosystem usage by a specific traditional population or economic cycle. A paleo-territory is the anthropogenic portion of the biotic and abiotic processes that affect the regeneration of forests, in which both the culture and technology of traditional human populations play a determining role. As such, the Atlantic Coastal Forest exhibits ecological attributes that reflect the long history of the co-existence of these populations within the regional ecosystem, and may hence not be a fully “natural” biome. The major impact of humans on the Atlantic Coastal Forest makes it imperative for any study of forest ecology to take account of human activity.

Japan’s Eco-Towns and Innovation Clusters: Synergy Towards Sustainability

Kazukiyo Higuchi, Michael G. Norton

There are substantial differences in resource productivity between countries. This suggests that the global environmental impact of economic activities could be reduced if appropriate policies were applied more widely. Japan has one of the most eco-efficient economies in the world. The present paper looks at the history of two central policy measures designed to stimulate the emergence of a more sustainable industrial base. One of these (Eco-town) focuses on creating concentrations of industry designed to use societal wastes and industrial by-products as sources of products and raw materials. The other (industrial clusters) encourages innovation and the creation of new businesses focused on environmental protection. The results are now showing that investment - both in recycling technology and facilities, and in organisational structures supporting a more recycling-oriented economy - promises to establish viable industries with significant contributions to local economies. The international relevance of Japan’s experience is also considered.