

# Abstracts

## **A Month in the Life of José Salud, Forester in the Spanish Philippines, July 1882** **Greg Bankoff**

The discovery of a monthly work schedule for José Salud, a district forester on the island of Panay, provides us with an unique insight into the operations and workings of the *Inspección general de Montes*, the Spanish colonial forestry service in the Philippines. The records of this agency were mainly lost in fire and war but the fortuitous preservation of a personal report for July 1882 provides us with a tantalising glimpse into the operations and methods of forestry in the archipelago at that time. For one month, we are able to follow an assistant forester on his daily rounds about Capiz and in so doing come to realise how the forest was being transformed from a resource and a refuge into an arena where state management practices and indigenous customary rights competed alongside those who saw trees as nothing more than a commercial enterprise. This paper charts a social and environmental history of scientific forestry during the last decades of the nineteenth century through the lens of one man's activities. Rather than being separate inquiries, these two perspectives reinforce and complement one another, providing greater insight into both colonial social dynamics and the state of the environment.

## **An Environmental History of Nacre and Pearls: Fisheries, Cultivation and Commerce** **Micheline Cariño and Mario Monteforte**

Pearls are the most ancient gems known in history. Nacre became an important raw material used in various industries during the nineteenth century. Both products came from the world's tropical seas, in pearling regions whose resources and people were exploited by local and foreign businessmen. We distinguish eleven pearling regions. These were opened to fisheries at different times in three historical periods, each marked by phases of wealth and scarcity.

The world history of nacre and pearl fisheries, culture, and trade is the history of the efforts of divers and sailors, the tenacity of scientists striving to elucidate the phenomenon of pearl formation, the ambition and greed of *empresarios* seduced by

the luster and commercial value of pearls, as well as the marketing and selling techniques specific to these commodities. It is the history of environmental modifications induced by humans as they strove to gain profit from the most valuable natural marine resource that ever existed. In this essay we highlight the role played by capitalism in the intensification of pearls and nacre harvesting that brought the resource to speedy exhaustion. We also illustrate the positive results of the application of scientific research based on sustainability principles to production. Our historical approach to pearling has led us to two fundamental conclusions: 1. It is possible to aim at sustainability in the profitable use of renewable natural resources, and 2. Environmental history can reveal the conditions under which this has been possible. Our intention here is also to show that environmental history is an approach allowing historical syntheses, the incorporation of vast comparative analyses, and the fleshing out of explanations of economic and social processes with an understanding of the natural resources that sustain these processes. Finally, this work looks to filling up the great gap in knowledge that afflicts the history of the sea.

### **Local People and the Global Tiger: An Environmental History of the Sundarbans** **Ranjan Chakrabarti**

The present article investigates the significance of the Sundarbans as a natural reserve or buffer area (a resource of yet unknown magnitude) in pre-colonial, colonial and post-colonial South Asia. In pre-colonial India this region was, by and large, outside the purview of the state and occasionally served as a natural reserve in more ways than one. In British India the vast mangrove swamp of the Sundarbans became an important location where European “Selves” and Indian “Others” started interacting. The Sundarbans jungle became the object of European thoughts and actions. A new systematic endeavour to manage this unknown and unique natural frontier began under the forceful thrust of European enlightenment. This quest for knowledge went on throughout colonial rule and even after Indian independence in 1947. The British colonial government sought to manage an area they had little understanding of, and hence incurred in a series of unforeseen problems which posed new challenges to the colonial project in the Sundarbans. In this area, the tiger had always been at the centre of people’s economic, social, cultural and religious life. This was the case in the past and still is today. During the *Raj*, the colonial drive to maximize revenue forced the inhabitants of the Sundarbans to come face to face with the tigers. In post-colonial India, the introduction of Project Tiger turned the Sundarbans into a local theatre of a larger campaign.

The present paper also seeks to explore the complex pattern of the production of knowledge and its short term and long-term implications. I argue that the human endeavour to manage unknown frontiers often produces new complications and brings to fresh engagements with new unforeseen challenges. This is all the more true of the last quarter of the twentieth century, when the impact of capital-

ism, politics and science was more distinctly felt at the global level. In the 1960's and 70's European wildlife biologists made a strong case of the fact that only in the forests of India and the mangrove swamps of the Sundarbans there were tigers in sufficient numbers for an effort to save this endangered species to have any likelihood of succeeding. The rhetoric of wildlife conservation fuelled a universal campaign which disregarded local knowledge systems. This campaign led to the launching, in 1973, of Project Tiger in nine reserve forests of India, including the Sundarbans. Project Tiger led to friction between the universal/global and the local, giving rise to new unexpected troubles which needed to be addressed.

## **The Creation and Management of Protected Areas in Monteverde, Costa Rica**

**Jason Davis**

At present, nature conservation depends heavily on protected areas to limit the destruction caused by human activities such as land clearing, logging, and urban development. Yet despite their importance and widespread use, the general public and policy makers frequently maintain a simplistic and static conception of protected areas. Often, the mental model of protected areas consists of a "one-size-fits-all" park – a fenced off area of land designed to protect "nature" from humans. In reality, however, protected areas are multifaceted, fluid entities that result from a confluence of people's ideas about what these areas are expected to accomplish and for whom they serve. Although protected areas sometimes do take the "fenced-off" approach, they take many other forms reflecting societal trends in conservation practice. History belies the idea of one standard type of protected area for all places and all times.

The area around Monteverde, Costa Rica, offers a distinctive case study of the development of protected-area conservation. Beginning in the 1950s with the arrival of American Quaker settlers, residents have created a protected area network that has grown and expanded to reflect the changing constituencies of the region: agriculturalists, biologists, international conservation groups, and tourists. The protected areas now safeguard local watersheds, protect endangered species and biodiversity, and provide the framework for a dynamic tourism-based economy.

Many scholars look at Monteverde's protected-area experience, particularly the development of nature-based tourism, as evidence of the area's success in conserving its natural resources and improving standards of living. However, it is problematic to use Monteverde as a direct model for successful conservation and development. The protected-area network grew out of a half-century of conservation initiatives driven by various local and international constituencies. Monteverde residents themselves have painted a balanced picture of the area's challenges, including successful conservation and a rise in living standards as well as rapid and unplanned tourism development, socioeconomic imbalances, and threats to the ecological integrity of the region. The Monteverde experience underscores the possibilities and challenges inherent in achieving multiple conservation and development goals through protected areas.

## **Urban Trees and Urban Environmental History in a Latin American City: Belo Horizonte, 1897-1964**

**Regina Horta Duarte**

This article deals with the city of Belo Horizonte, founded in 1897 in south-eastern Brazil, and designed after European models of what would constitute a “civilized” town in terms of sanitation and hygiene. Over the decades, however, its inhabitants have been confronted with challenges and obstacles determined by the specific historical context of Latin America. I focus here on an emblematic event, viz. the cutting down of 350 *Ficus benjamina* planted along the principal avenue of Belo Horizonte, just before the 1964 military *coup d'état*. This decision split the inhabitants and took on emotional, urban, social and, above all, political significance. Rather than restricting myself to an analysis of this case study, I want to use it as a springboard for a discussion on the relationship between nature and society in Latin American urban environments. The case of Belo Horizonte exemplifies how studies of this theme must necessarily take into account the political and historical peculiarities of Latin American societies, and how these societies are enmeshed in transnational networks whose political and social significance is manifested in phenomena such as the acclimatization of ficus trees, the introduction of sparrows, and the attack of thrips.

## **Postponed Leap in Carbon Dioxide Emissions: The Impact of Energy Efficiency, Fuel Choices and Industrial Structure on the Finnish Energy Economy, 1800-2005**

**Jan Kunnas and Timo Myllytaus**

The article examines the growth and composition of energy consumption in Finland in the 19th and 20th centuries, focusing on energy-related carbon dioxide emissions. It is based on the results of a research project that estimated the energy production and consumption of Finland since 1800 and calculated the country's energy balance, including both commercial and non-commercial energy sources. The article argues that, among European countries, Finland was “odd-man out” because it industrialized by means of renewable, indigenous energy sources. Only in the 1960s, in its mature phase of industrialization, did the country switch from indigenous energy sources – fuel wood, wood refuse and hydropower – to imported fossil fuels. The article analyses why Finland differed from the general model for such a long time and why it joined the ranks of other countries in a fairly short period.

## **Reconstructing the History of Forestry in Northwestern China, 1949-1998**

**Jinlong Liu**

This paper reconstructs the history of forestry and changing patterns of forest tenure rights through the case study of Hui county, in the northwestern province

of Gansu in 1949-1998. It focuses on the environmental impact and social effects of constantly changing forest policies, and examines conflicts between different stakeholders, including private owners, collectives, and the state at different administrative levels. The research draws on accounts of historical events available in unpublished official documents, as well as the recollections of a number of elderly informants from the northwestern region, to look for patterns of social and economic change. The author maps out shifts in forest policy during the periods of the collectivization of agricultural production and household responsibility system. These policies led to China's "opening up" in the 1980s and 1990s, when changing relations between the state and an expanding market economy began to impact the country. A series of cases are used to illustrate the types of conflict and forms of negotiation that occurred at particular junctures.

### **Ecological and Poverty Impacts of Zimbabwe's Land Struggles: 1980 to Present** **Vimbai C. Kwashirai**

Literature on Zimbabwe's land struggles is dominated by a particular perspective emphasizing the historical rooting of inequitable land distribution and ownership in British colonial rule from 1890 onward. This view is informed by the imperative of redressing a historical injustice wherever British people alienated prime land from, among others, the indigenous Shona, Ndebele and Tonga. The key element in this perspective has been the science of land management, and particularly the protection of wooded areas, the soil and wildlife. The discourse on ecological calamity stresses the harmful consequences of unregulated agriculture, mining and hunting, the threats posed by degradation, and the need to control methods of resource exploitation. This study examines the debates on, and processes of, land reform in Zimbabwe in the independence era (1980-present), exploring the social, economic and political contexts of perceptions of land redistribution and management. Zimbabwe's major land reform programme was carried out between 2000 and 2002. An estimated 300,000 small-holder farmers were provided with land holdings ranging between 5 and 10 hectares. In addition, land was set aside for 54,000 black commercial farmers. Of the original 5,000 white farmers in 2000, only 600 were estimated to have remained in full production on their farms. Much of this period has been characterised by both local and global debates about land reform and environmental problems, generating in their wake politically charged and emotive argumentations about issues such as poverty, deforestation, soil erosion and threats to wildlife.