

Book review

STERNBERG, H.O'R.: *A água e o homem na várzea do Careiro*. 2nd edition. Coleção Friedrich Katzer. Museu Emilio Goeldi, Belém, Brazil. 1998. Vol 1: 248 p. + liiii- lxxxii, vol. 2: 18 maps. 50,- Reais (aprox. 25,- US\$). ISBN 85-7098-053-1 (hbd).

The floodplains of white water rivers (*várzeas*) were privileged settling areas for man since his arrival in the Amazon basin about 12,000 years before the present. Large amounts of shellfish, fish and game animals provided animal protein for the early hunter gatherers. About 4,000 years ago, Amerindians began with agriculture that was favored by the fertile soils of the *várzea*. After the arrival of the Europeans, the indigenous population was quickly reduced by wars, slave raids and introduced diseases. Natural stocks of game animals were overexploited and in the middle of the 19th century European settlers and their descendents introduced cattle ranching for beef and milk production. Until the Second World War, scientific studies about the Amazon floodplain and its use were mostly restricted to travel reports of naturalists who visited the area and to the taxonomic description of plant and animal species with remarks about their life history.

Modern natural sciences on a major scale began only after the war. One of the first detailed studies of land use practices was carried out in the beginning of the 1950's by the geographer Hilgard O'Reilly Sternberg and published in 1956 entitled "A água e o homem na várzea do Careiro" ("Water and man in the *várzea* of Careiro"). He used a holistic approach for the characterization of man's activity on the large island Careiro, at the confluence of the rivers Solimões/Amazon and Negro. First, he describes the history of human occupation of the region. With ¹⁴C analyses of indigenous artifacts he proves that there has been colonization of the island by man for about 2,000 years at least. As early as the 18th century, the island became of increasing importance for the supply of the capital Barcelos, situated on the middle Negro River, with fish and river turtles. In the middle of the 19th century the island's farmers supplied vegetables and fruit to the population of Vila de Barra, later called Manaus, and since the beginning of the 20th century they have provided beef, milk, and cheese to the growing population of the city, which in the early 1950s had about 90,000 inhabitants. He shows the economic and cultural impact of the immigrants from the semiarid Ceará in the north-east of Brazil that is still visible today in cattle ranching practices on Careiro Island.

The description of the process of land distribution to the smallholders, their socio-economic situation, the land use pattern, and the economic importance of different crops and cattle ranching represent the historical base line for modern studies about the development of agriculture and husbandry in the central Amazonian *várzea*. O'Reilly Sternberg relates the economic development of the island to climate, hydrology, and fertility of water and soils, describes the impact of water level fluctuations, related erosion and sediment deposition processes on agriculture and cattle ranching, as well as the daily life of man in the *várzea*.

In spite of its great importance for the region and its modern scientific approach, O'Reilly Sternberg's study has been little used in recent years by young scientists, mainly because they had no access to it. The authors of many scientific studies could have reaped great benefit from reading this study before starting their projects. Therefore, the effort of the Museu Paraense Emilio Goeldi in Belém, Brazil, to republish this classic work for a comparatively low price is greatly welcomed by the scientific community. An appendix

about the most recent studies in the *várzea* near Manaus, written by Joachim Adis from the Max-Planck-Institute for Limnology in Plön, Germany, and a set of maps complete the second edition of this remarkable book.

Priv.-Doz. Dr. Wolfgang J. Junk
Tropical Ecology Working Group
Max-Planck-Institute for Limnology
Postfach 165
24302 Plön/Germany