
Past human occupation of the Guianese forest: what wood charcoals tell us.

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Abstract

Past human impacts on Amazonian forests are now widely and increasingly documented. Whether in terms of floristic composition or of soil structure and contents, testimonies of past occupation and land use are clearly visible. Though still poorly studied from an archeological point of view, the Guianese forests make no exception and reveal their own anthrosols, rich in charcoals and pottery sheds. The LongTime project (**Long Term Impact** of ancient **Amerindian** settlements on the Guianese forests) aims at defining the impact of pre-Columbian activities on forest structure and composition through a pluridisciplinary approach, including anthracology. Soils under different types of vegetation (bamboo thickets, liana forests and high canopy forests) were sampled in the Nouragues Reserve, French Guiana, in order to detect gradients of pre-Columbian activities. Peculiar sites detected by LiDAR were also investigated: a 'ring-ditched hill' and a 'ring-ditched plateau', which are sites surrounded by ancient manmade ditches. Two sampling protocols were carried out and will be discussed here: the first one is to harvest charcoal on soil profiles, the second one to collect several samples with a soil auger on a 1-ha area around each profile, in order to improve the sampling of floristic diversity. The first results given by charcoal identification reveal a high floristic diversity in some of the studied areas and the presence of useful tree species. First ¹⁴C datings point several periods of occupation on some sites and give an insight into the burnt vegetal communities present and used by humans at these time periods. These results will be further analyzed in combination with present-day floristic composition and other pedological bio-proxies such as soil structure, micromorphology and phytoliths contents.

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