

Project Update: December 2016

The first fieldwork campaign was concluded. Samples of leaves, sediment, and leaf litter were obtained at the six study sites in the Estuarine-Lagunar Complex of Cananeia-Iguape, totalling samples of 162 mangrove trees, 128 sediment samples, and 54 leaf litter samples. The redox potential, pH and temperature of sediment interstitial water at the sediment sampling points were also recorded with a portable meter. Extra sediment and leaf litter samples were also obtained and a pilot study was conducted in the field to determine the best incubation period for biological nitrogen fixation essays that will be carried out in the next fieldwork campaign. Currently, samples are being processed in laboratory and analysed for nutrient concentration, net rates of nitrogen mineralization and nitrification rates in sediment, and the $\delta^{15}\text{N}$ in the sediment-plant-leaf litter system.



Left: Fringe mangrove site in the Cardoso Island State Park, Brazil. Right: Identifying sampled mangrove trees at the basin mangrove site in Cananeia Island, Brazil. Photos by Beatriz de Campos.