

the shelter of a solitary tree, his slumbers are disturbed by a serenade from the forest.

We set sail before sunrise, on the 2nd of April. The morning was beautiful and cool, according to the feelings of those who are accustomed to the heat of these climates. The thermometer rose only to 28° in the air, but the dry and white sand of the beach, notwithstanding its radiation towards a cloudless sky, retained a temperature of 36° . The porpoises (toninas) ploughed the river in long files. The shore was covered with fishing-birds. Some of these perched on the floating wood as it passed down the river, and surprised the fish that preferred the middle of the stream. Our canoe was aground several times during the morning. These shocks are sufficiently violent to split a light bark. We struck on the points of several large trees, which remain for years in an oblique position, sunk in the mud. These trees descend from Sarare, at the period of great inundations, and they so fill the bed of the river, that canoes in going up find it difficult sometimes to make their way over the shoals, or wherever there are eddies. We reached a spot near the island of Carizales, where we saw trunks of the locust-tree, of an enormous size, above the surface of the water. They were covered with a species of plotus, nearly resembling the *anhinga*, or white bellied darter. These birds perch in files, like pheasants and parrakas, and they remain for hours entirely motionless, with their beaks raised toward the sky.

Below the island of Carizales we observed a diminution of the waters of the river, at which we were the more surprised, as, after the bifurcation at *la Boca de Arichuna*, there is no branch, no natural drain, which takes away water from the Apure. The loss is solely the effect of evaporation, and of filtration on a sandy and wet shore. Some idea of the magnitude of these effects may be formed, from the fact that we found the heat of the dry sands, at different hours of the day, from 36° to 52° , and that of sands covered with three or four inches of water 32° . The beds of rivers are heated as far as the depth to which the solar rays can penetrate without undergoing too great an extinction in their passage through the superincumbent strata of water.